

India Development Update

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Preface

The India Development Update (IDU) has two main aims. First, it provides a factual account of the key developments in India's economy over the previous six months and places these in a longer-term and global context. Based on these developments and on policy changes over the period, the IDU also discusses the outlook. Second, the IDU provides a more in-depth examination of selected economic and policy issues and an analysis of India's medium-term development challenges.

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1. Overview

These are exceptional times worldwide. A highly infectious novel virus, COVID-19, has spread rapidly across the globe, infecting nearly 17.3 million people, and causing over 670,000 deaths as of July 31, 2020, in a short span of time. Governments have responded by limiting or prohibiting human interactions to contain the spread of the virus and flatten the incidence curve. These containment measures have resulted in an unprecedented decline in economic activity. The global economy is projected to contract sharply this year even under the most benign baseline scenarios. While the contraction is likely to be steeper in advanced economies, emerging markets and developing economies (EMDEs) are projected to contract markedly too.

Globalization has retreated further in the wake of the pandemic and old paradigms are being challenged. International movement of persons has dramatically declined; global trade has nearly collapsed due to anaemic global demand, disruptions in supply chains, and new protectionist measures; investor risk aversion has increased, resulting in a flight to safety and capital flows reversal from emerging markets. Existing models and previous assumptions about the policy space, role of the state, and adequacy of social protection systems appear grossly inadequate to respond to the current situation.

India has been impacted by the virus too. Despite taking early pre-emptive distancing and isolation measures, over 1.6 million people were infected, and over 35,700 deaths were attributed to the virus as of end-July. As was the case elsewhere, the domestic containment measures and global developments are projected to have sizable economic implications in India too.

The pandemic has afflicted India at a time when its economy had already been decelerating. Defying a long-term accelerating path, real GDP growth moderated from 7.0 percent in 2017-18 to 6.1 percent in 2018-19 and 4.2 percent in 2019-20. The pre-COVID-19 growth deceleration was perceived to be due to long-standing structural rigidities in key input markets; continuing balance sheet stress in the banking and corporate sector, which were compounded more recently by stress in the non-banking segment of the financial sector; increased risk aversion among banks and corporates; a decline in rural demand; and a subdued global economy.

Several policy actions were initiated to arrest the pre-COVID-19 slowdown. These include a reduction in the corporate tax rate; regulatory forbearances for micro, small, and medium enterprises (MSMEs), non-bank financial companies (NBFCs), and the telecom and real estate sectors; recapitalization and consolidation in the banking sector; an ambitious disinvestment plan, some rationalization, and reduction in personal income tax rates; and business regulatory reforms. In addition, reversing nearly a two-decade long process of trade liberalization, a number of tariff and non-tariff measures were initiated to restrict imports.

The pandemic cut short any hope that these actions would yield the expected payoffs. The outlook has now changed substantially, and the economy will likely contract in the current fiscal year. The economic impact of the pandemic will be felt through the following channels: (i) a direct decline in domestic demand and supply disruptions triggered by the containment measures, resulting in a near collapse in certain service activities such as trade, transport, tourism, and travel; (ii) a second round of consumption and investment slowdown, compounded by (and ultimately driving) distress in the financial sector and financial markets; (iii) a global economic slowdown and decline in trade, resulting in a smaller global export market and weaker remittances, and a retreat in capital flows amidst heightened risk aversion.

The government and the Reserve Bank of India (RBI) have taken timely and extensive policy actions. These include enhanced social protection measures, monetary policy easing, regulatory forbearance, and liquidity injections. These measures aim to provide immediate relief to households and firms impacted by COVID-19. Besides these immediate recovery measures, the government has used the opportunity to announce reforms aimed at easing investment in agriculture, and micro, small, and medium

enterprises, and reducing the size of the public sector. Going forward, it would be important to continue with reforms to address the immediate and medium-term challenges that the economy faces. Most of these are not new but have now acquired additional urgency and importance, to put the economy back on a sounder footing toward a 7-percent-plus growth path.

a. Global economic implications of COVID-19

The ongoing COVID-19 pandemic is proving to be one of the most severe shocks to the world economy in nearly a century. The global economy is consequently expected to contract in 2020. Advanced economies are expected to transition from an expansion in 2019 to a contraction of several percentage points in 2020.

Global trade is experiencing its worst contraction in post-war history. The fall in activity has been concentrated in traditionally stable service sectors such as tourism. While global value chains had benefitted from a slight easing in tariffs and tensions between the United States and China in February 2020, the COVID-19 outbreak has triggered stringent border controls and production delays that have dented the global supply chains in recent months. Driven by collapsing demand, commodity prices have declined, led by a precipitous fall in the price of oil. The pandemic is also expected to affect international migration and remittances (please refer to the World Bank's Migration and Development Brief). The economic slowdown is likely to directly affect remittance outflows from the United States, the United Kingdom, and EU countries; while falling oil prices will affect remittance outflows from GCC countries.

Global financial markets experienced volatility when the COVID-19 spread globally. The VIX index of market volatility initially spiked to levels last seen during the global financial crisis (GFC) of 2008-09. The strain on many countries' financial systems was apparent amidst flight to safety by investors. Liquidity stress permeated to several segments of the financial markets, including corporate and government debt. As a result, many emerging and developing economies have had to endure a financial shock alongside a real shock. They experienced substantial capital outflows, larger than in any other recent emerging market sell-off event. This led to a tightening of financing conditions, widening bond spreads, and exchange rate depreciation. Tightening liquidity made it more challenging for private and government borrowers to roll over their debts.

These global developments have also impacted India. India is a large emerging market with an open capital account. It has incrementally, but consistently, liberalized its capital account over the past two decades. The COVID-19 outbreak has affected all key financial markets in India, including equity markets, the exchange rate, bond yields, and non-resident portfolio flows. The equity market declined by nearly 28 percent, the exchange rate depreciated by 7 percent, and the net withdrawal of portfolio flows were of the order of 16 billion dollars between January 30, when India declared its first COVID-19 case, and the end of March. Equity markets later recovered, but they were 20 percent down from their level at the beginning of the year as of the end of May. Bond yields in local currency declined by about 50 basis points (bps), even as the spreads on dollar bonds increased.

A decline in oil prices is considered a positive terms of trade shock for India in ordinary times. It alleviates pressure on the current account and can provide an opportunity to raise taxes on oil consumption and phase-out energy subsidies. Under the current circumstances, with oil demand at historically low levels, the positive effects of oil prices are likely to be muted.

b. The Indian economy before the COVID-19 shock

After averaging about 7 percent in the last decade, real GDP growth has decelerated in recent years. Growth moderated from 7.0 percent in 2017-18 to 6.1 percent in 2018-19, and further to 4.2 percent in 2019-20. The slowdown extended to investment, exports, and private consumption on the demand side; and to manufacturing, construction, and various service activities on the production side. The growth deceleration was perceived to be due to long-standing structural rigidities in key input markets, and

continuing balance sheet stress in the banking and corporate sectors, which were compounded more recently by stress in the non-banking segment of the financial sector, increased risk aversion among banks and corporates, and a subdued global economy.

In response, a number of policy actions were announced. These consisted of a reduction in the corporate tax rate, regulatory forbearances for MSMEs, NBFCs, and the telecom and real estate sectors, recapitalization and consolidation in the banking sector, an ambitious disinvestment plan, some rationalization and reduction in the personal income tax, and business regulatory reforms.

Inflation has been well anchored and has declined steadily over the past decade, especially since the country moved to inflation targeting in 2016-17. With economic growth moderating, and inflation within the inflation targeting range, the RBI changed its monetary policy stance from neutral to accommodative and lowered the policy rate four times, by a cumulative 110 bps from 6.25 percent to 5.15 percent during April 2019 and February 2020. Subsequently, it lowered the policy rate twice again in response to the pandemic, by a total of 115 bps, bringing the key policy rate, repo, to 4.0 percent. It also lowered the reverse repo rate by a larger cumulative amount of 155 bps – from 4.90 percent to 3.35 percent.

India's external position has been robust, underpinned by a modest current account deficit and large foreign reserves. The current account deficit (CAD) has averaged about 1.5 percent of GDP in the past 5 years. It declined to 1.0 percent of GDP during 2019-20, due to a contraction in imports, attributed to the slowdown in the economy, moderation in import prices, and to import substitution measures. Exports have slowed as well, but less sharply than imports, resulting in an improvement in the trade and CADs. Within total capital flows, India receives both FDI and portfolio equity and debt flows. Similar to the experience of other emerging markets, FDI flows have been stable, while portfolio flows exhibit episodic volatility.

The fiscal deficit has declined over the past decade, but it has exceeded the budget estimates in recent years. Moreover, even as the officially reported deficit has declined, concerns have emerged about the off-budget incurrence of the deficit. In the 2020-21 budget, the central government revised its deficit estimate to 3.8 percent of GDP, up from 3.3 percent budgeted in 2019-20. The actual outturn was even higher at 4.6 percent of GDP.

Likewise, general government debt increased to nearly 73 percent of GDP in 2019-20, after having remained stable at around 69 percent in the previous years. In a technical sense, India's public debt is considered sustainable, being largely domestic, local currency denominated, and long term; and because nominal GDP growth has typically been higher than the interest rate at which the debt has been raised. Yet, the level of debt is high given India's income level and market access. Debt servicing costs are at nearly 5 percent of GDP, which means that precious resources could be saved by consolidating debt or raising it more efficiently. Besides, government borrowings nearly exhaust household savings, practically crowding out the private sector. Further, the ongoing COVID-19 pandemic is expected to affect fiscal and debt outcomes drastically, as we explain below.

The resolution of the decade-long balance sheet stress in the financial sector has remained a work in progress. The RBI's Financial Stability Report, released in July 2020, reports that even though the banking sector is stable, there are key downside risks related to economic prospects. Risks related to economic growth and India's fiscal position were rated as 'very high'. The overall NPA ratio declined from its peak of 11.6 percent in 2018 to 8.5 percent in March 2020. While the government introduced measures to address the prevalence of NPAs in the banking sector, including a novel Insolvency and Bankruptcy Code, bank recapitalization program, and the consolidation of banks, the RBI noted the ratio is likely to increase over the next year due to increased stress emanating from the current crisis.

c. The Impact of COVID-19 on the Indian Economy

The impact of COVID-19 on the economy has come in two phases. Initially, the main economic impacts of COVID-19 were due to supply disruptions from China, and concentrated in activities such as tourism, aviation, and other services. Thereafter, as the virus spread across the world, denting the economic outlook and impairing investor sentiment, it further impacted growth, investment, exports, and remittances.

India implemented stringent lockdown and social distancing measures to curb the spread of the COVID-19 pandemic, resulting in a quasi-standstill in economic activity in the first two months of the current fiscal year. The lockdown period is likely to have adversely impacted the balance sheets of households and firms. Social distancing provisions of varying stringency will probably need to remain in place even beyond the lockdown period. Furthermore, even after the lockdown is lifted, businesses will incur fixed and variable costs to adhere to new safety, hygiene, and social distancing norms. This would test the viability of businesses. Another issue that may emerge is the availability of migrant workers to work in urban centres after a large number of them returned home.

These mutually reinforcing disruptions in domestic supply and demand are expected to result in a growth contraction in FY20/21, and the recovery is expected to be gradual thereafter. Acknowledging considerable margins of uncertainty around any point estimate projection, using information available until the end of May¹, we projected that the economy will contract in FY20/21 by over 3 percent and the rebound will be muted in FY21/22 in spite of the significant base effect. In the current, rapidly evolving context these projections are likely to be revised as new information is incorporated, especially as the daily number of cases continues to increase resulting in several states and districts re-imposing lockdowns; and available high frequency indicators show that the economy has not yet reverted to baseline. In our revised projections, which would be available in October 2020, we would likely project a steeper contraction in the economy. The prospects for the global economy also remain muted and this will add further downside risks to the outlook. On the supply side, the services sector will be particularly impacted. On the demand side, any revival in domestic investment is likely to be significantly delayed while neither private consumption, nor government spending, nor external demand available to boost aggregate demand. Reflecting subpar economic activity, inflation is expected to fall to an average of about 3.0 percent in FY20/21 before rising gradually in the following years. The current account is expected to be almost balanced or in a small surplus in FY20/21, on the back of a decline in economic activity and a weak external environment.

Significant fiscal implications are expected in the wake of the COVID-19 outbreak. With the revenue outlook seriously dented, and new expenditure imperatives, the fiscal deficit and debt of the central and state governments are likely to increase sharply over the next two years. In a baseline scenario, which takes into account revised growth projections, lower-than-expected divestment proceeds, and new expenditure commitments, the fiscal deficit of the central government is projected to increase to 6.6 percent of GDP in FY20/21 and remain at a high of 5.5 percent in the following year. Assuming that, the states' deficit is contained within 3.5-4.5 percent of GDP, the deficit of the general government may rise to around 11 percent in FY20/21. India's debt-to-GDP ratio is projected to increase significantly in the short term, reflecting the expected contraction in GDP growth and increase in the primary deficit. While there is a significant level of uncertainty around the projections, the general government debt-to-GDP ratio is projected to peak at around 89 percent in FY22/23 before gradually declining thereafter. In alternative scenarios, the deficit and debt numbers may turn out to be even higher.

¹ The latest consensus forecasts are pointing to a contraction of 4.6 percent in FY20/21. This is a downward revision from the average forecast in June 2020 of a contraction 3.4 percent (Consensus Economics, July 13, 2020).

The risks to this outlook are mostly on the downside. They stem from mobility remaining significantly constrained over the second quarter of the fiscal year, additional strains on the financial sector materializing, and the global outlook deteriorating further.

Slow growth has been considered one of the main risks to the financial sector in RBI's Financial Stability Review. The risk could play out from the credit risk side as firms and households find it more difficult to service their interest and repayment obligations in a slowing economy. Collateral values could decline, and NBFCs would be particularly vulnerable since they lend to sectors susceptible to economic and asset price cycles (personal, auto, housing, real estate loans). Banks may need to make higher provisioning, and additional infusions of capital which would be hard to mobilize under a situation of fiscal stress, and subdued valuations in financial markets. There is a concern regarding liquidity challenges turning into solvency challenges.

d. COVID-19 impact on poverty

India has made remarkable progress in reducing absolute poverty since the 2000s, but challenges remain. Between 2011 and 2015, poverty is estimated to have declined from 21.6 percent to 13.4 percent (at the international poverty line), lifting more than 90 million people out of extreme poverty. However, reducing broad-based poverty in the presently excluded groups (such as women and scheduled tribes) and extending gains to a broader range of human development outcomes has remained challenging.

Half of India's population remains vulnerable to a greater exposure to COVID-19 impacts, with consumption levels precariously close to the poverty line. These households are at risk of slipping back into poverty due to income and job losses triggered by COVID-19. Poorer households are more prone to getting infected by the virus, since it is more difficult for them to implement social distancing and as they have limited access to health care. The lockdown has had an adverse economic impact on the informal sector, in which the poorer households are employed. Finally, any potential rise in prices can erode their purchasing power.

The extent to which poverty is impacted will depend on the spread of contagion and market and government responses. The impact will depend on how quickly labor markets adjust and the rate at which migrant workers return to employment opportunities in urban locations after the restrictions are rolled back. Meanwhile, social protection policies (PDS, MNREGA, cash transfers, pensions, support for SMEs) have a key role in mitigating the shocks on the extreme poor.

Labor market informality constrains the ability of Indian households to cope and recover from livelihood shocks triggered by lockdowns. Ninety percent of the Indian workforce is informal, without access to significant savings or workplace-based social protection benefits such as paid sick leave or provident fund. The latest Indian PLFS (2018-19) found that only 47.2 percent of urban male workers and about 55 percent of urban female workers had regular wage/salaried employment in the usual status. Even among workers in formal employment in the non-agricultural sector, about 70 percent did not have written contracts and about 52 percent were not eligible for any form of social security benefits. These populations are at risk of falling into poverty due to wage and livelihood losses triggered by slowing economic activity.

In India, inter-state migrants are particularly at risk of increased poverty and destitution. Seasonal migrants dominate low-paying, hazardous, and informal jobs in key sectors in urban areas, such as construction. Estimates from the Economic Survey highlight that inter-state labor migration in India was close to 9 million annually between 2011 and 2016. Migrant remittances are also vital for lower-income Indian states. Following the loss of employment due to COVID-19 lockdowns, these migrant workers are at increased risk of falling into poverty. The lack of portability in social protection benefits across state boundaries makes migrants more vulnerable. With unemployment increasing, and the decline in earnings and remittances, migrant workers and their families may need targeted support.

e. Policy imperatives to stabilize the economy and ensure medium-term outcomes

Most governments across the world have responded with monetary, fiscal, and regulatory policy measures to support their economies. Measures along these lines have been announced in India too. Under the Aatma Nirbhar Bharat Abhiyaan (Self-reliant India), the government announced an economic stimulus package amounting to INR 20 trillion (about 10 percent of GDP). The package includes liquidity measures announced by the RBI, the cost of regulatory forbearance, temporary tax relief, credit guarantee programs, and direct spending on a range of measures. The bulk of the direct government spending was aimed at poor and vulnerable households under the Pradhan Mantri Garib Kalyan Yojana (PMGKY), which provides a package of cash and in-kind social assistance.

The package of measures uses India's existing public distribution system (PDS) to create a temporary basic minimum entitlement of rations for all and an increase in ration entitlements for registered beneficiaries. Other measures include top-up cash transfers to farmers, higher wages under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), additional welfare transfers to the elderly, widows, and the disabled, direct cash transfers to women with Jan Dhan Accounts, and free cooking gas cylinders for three months to poor beneficiaries. The central government would make provident fund contributions for employees and employers for 6 months for firms that mainly employ workers below a certain income level. It also amended the Employee Provident Fund (EPF) regulations to allow workers to access a non-refundable advance from their provident fund accounts. Forbearance measures on tax collection included extending the last date for filing income tax, the last date of dispute resolution and tax amnesty scheme and extending the deadline for filing Goods and Services Tax (GST) returns.

States have also announced complementary welfare measures including increased entitlements of subsidized rations through the PDS and increased direct cash transfers to beneficiaries of state pension schemes. To ease the pressure on states budgets, the central government released their share of central taxes for the month of April on the basis of budget estimates of revenue collection and encouraged state governments to make direct transfers to unorganized construction workers from their Labor Welfare Board funds. States' borrowing limit has been increased from 3.0 to 3.5 percent of Gross State Domestic Product; which could be further increased up to 5.0 percent, conditional on the implementation of a certain set of reforms.

The RBI has announced an array of timely measures. Policy rates were cut by 75 bps (to 4.4 percent) at the end of March and once again to 4 percent in May. Cash reserve requirements for banks were lowered from 4 percent to 3 percent for a year. The RBI announced a moratorium on repayments of all term loans, retail and corporate, to all financial institutions for three months, and a deferment of interest on working capital facilities. It increased the overnight borrowing limit for commercial banks under the marginal standing facility (MSF), and announced several liquidity easing measures targeted at different parts of the financial system, including corporate bonds, NBFCs, and mutual funds. The RBI also increased the limit on ways and means advances for states and took additional measures to ease their liquidity constraints.

Growth weaknesses may give rise to a number of challenges going forward, including on fiscal outcomes, financial sector metrics, and investor sentiment. Thus, it would be important to navigate the slowdown in a way that when COVID-19-related risks have subsided, the situation remains manageable on fiscal, financial, and external accounts, and the economy can embark on a path of strong recovery and resilience. It would be important to ensure that the medium-term reforms are carried out at some pace, and the needed fiscal backstop is made available to ensure the stability of the banks and NBFCs. Since the financial sector has been considered to be a growth bottleneck in past years, it would be important to complete the restructuring and reforms required to put the sector on a sounder footing.

Fiscally, it would be challenging to generate tax and non-tax revenues, while there would be an impetus to step up public expenditure. It would be useful to think of ways to finance elevated deficit

and debt. Reassessing subsidies to leverage any scope for efficiency gains may be useful. While it may be necessary to borrow abroad, an informed discussion of how much can be safely borrowed, and in which currency, would be useful. Once valuations in asset markets have been restored somewhat, one may think of generating nontax revenues more aggressively than has been the case thus far. Tying the repayment of new borrowings to disinvestment receipts may help put planned disinvestment back on the fast track. Even if fiscal spending is the need of the hour, the way it is financed will become important both for the cost of debt financing and its sustainability.

Capital flows and net balance of payment deficit would depend on the sentiment of global investors and international liquidity conditions. Over the medium term, shifting the mix of capital toward FDI would be useful to not only relax the resource constraint, but also to foster greater integration into global value chains, spur complimentary domestic investments, and decrease India's reliance on fickle portfolio flows. In the short run, leveraging new resources from non-resident Indians may help bridge the gap in a cost-efficient and safe way, as has been the case in some of the past episodes of balance of payment gaps.

The current pandemic has indicated that India could explore new economic opportunities in the areas of digital technology, efficient retail, new avenues in health-tech and ed-tech services, and global demand in areas such as pharmaceuticals, medical equipment, and protective gears. Leveraging these opportunities can provide new growth levers. The crisis may also be used as an opportunity to expand the coverage of social security and lay out a robust and modern system of social protection in urban areas and expand the existing one in rural areas.

The COVID-19 crisis has raised additional questions on how to further support vulnerable sections of the society, revive the economy, and support businesses and the financial sector: How much fiscal space does the government have and how can additional revenue be raised? How would the government and the RBI unwind their expanded positions? What would be the role of the state going forward and how would this role be divided between the center and the states? How long will it take for the consumer behavior to normalize? What kind of changes would persist beyond the pandemic and how would businesses and public policy internalize them?

There is no precedent or clarity on these questions. The answer would depend crucially on the duration of the pandemic, whether it will moderate after the current phase, and how soon normalcy in economic activity and behaviour would be restored both nationally and globally. What one can say with more certainty is that with vaccines not expected to be available for several months, and the herd immunity levels unlikely to be reached within months, the current year will be challenging.

f. A closer look at selected policy and technical issues

Part B of the report provides the outlook for the global and the Indian economy and contains discussion of a few policy and technical issues of topical interest. We provide in-depth coverage of the issues related to trade policy, social protection, and the financial sector. We also discuss the innovative use of high-frequency data such as electricity consumption and night-time data to track economic momentum in real time and to complement more traditional measures. We also illustrate an exercise containing micro-simulation analysis to assess the short-term distributional impacts of the COVID-19 crisis. The results of such a simulation exercise can provide useful benchmarks to design specific support policies.

The note on trade policy developments reports that the global trade is showing continued weakness amid heightened economic policy uncertainty. Direct supply disruptions are likely to affect domestic production and export activities in India; furthermore, the growth shock in India's major trading partners will also reduce their export demand. India's goods trade growth has already been slowing steadily since 2013, and its growth decelerated further at the end of 2019. Services exports, on the other hand, have maintained a healthy growth rate. Trade policy measures undertaken in the last few years have consisted of

both trade restrictive and liberalizing measures. While there has been an increase in simple average tariff rates in 2018 and 2019, simultaneously, other measures have been taken to facilitate trade and liberalize investments.

Looking ahead, the policy responses to a more uncertain global economy should seek to reduce risks and provide stability for investors. The current crisis can open new opportunities for India. One expected effect of the crisis is that multinationals will be seeking greater diversification of their activities away from China. Whether India can seize this opportunity will depend on its capacity to implement economic reforms, which may not include the use of tariffs as a recommended policy for India to pursue. On the contrary, trade policy must be “an enabler.”

Social protection programs help people become resilient against the risks they face as they seek to lead productive lives and expand their capabilities. The note on social protection outlines how India’s overall social protection system can be strengthened in the context of the ongoing COVID-19 crisis. In triggering a social protection response program through the PMGKY and Pradhan Mantri Garib Kalyan Rojgar Yojana (PMGKY), India has relied on public works and in-kind and cash transfers through its various pre-existing schemes and platforms. By doing so, the country is leveraging different mechanisms of service delivery, including piggybacking on state government systems in the context of federal India, large rural safety nets, food distribution outlets, community organizations and self-help groups, and direct benefit transfers (DBTs) into bank accounts. The national government has also taken an important step to make the PDS portable and more accessible during this time of crisis.

India’s existing social protection measures provide an important foundation to build a modern social protection system. Future growth and resilience depend on how the social protection system tackles disasters, decentralized governance, a flexible gig economy and demographic changes. At this stage of development, where nearly half of India is precariously close to the poverty line and given the devastating impacts of COVID-19, India needs an overarching strategy to guide how various innovations, schemes, staff, and budgets will coordinate to ensure adequate social protection coverage for the poor and vulnerable. The note on social protection identifies three areas for strategic reforms – (i) creating protocols which empower states to provide cash-based assistance in the context of disasters and financing their social protection needs (ii) scaling up portable cash and insurance support for the urban poor, and (iii) fostering deeper accountability and institutional convergence for social protection. These reforms can help India pivot its social protection system to address the needs of a more urban, mobile, and diverse population.

A third note points out that the recent liquidity and performance issues in the financial sector, exacerbated by the COVID-19 crisis, present policymakers with a strong reason – and an opportunity – to accelerate efforts toward building a more efficient, stable, and market-oriented financial system. The COVID-19 pandemic risks exacerbating long-standing structural issues in the financial sector such as slowing credit growth, liquidity shortages in the NBFC sector, and a high level of non-performing loans (NPLs). Multiple reforms in recent years have improved India’s financial sector oversight and financial inclusion, but more needs to be done to cope with the current headwinds and to improve the safety, depth, and efficiency of financial intermediation. The authorities’ anti-crisis response in recent months focused on injecting liquidity into the financial system and credit support windows to MSMEs and NBFCs, among others. Borrowers were provided temporary relief through a loan moratorium and suspension of insolvency procedures, while lenders benefit from regulatory forbearance. While these extraordinary steps help mitigate the immediate crisis impact, preparations should be made to cope with an anticipated increase in NPLs and potential solvency issues for banks and NBFCs after the measures expire.

The note identifies five areas for reforms for enhanced stability and efficiency of the sector. These are as follows: (i) Maintaining financial sector stability is a critical challenge in the light of increased risks. The toolkit may include the RBI’s continued focus on risk-based regulation and supervision; further strengthening of financial sector safety nets; strengthening of liquidity and capital buffers as well as the

regulatory and institutional framework for debt restructuring and insolvency. 2) Reforms in the NBFC sector are needed to support its role in channelling credit to the real sector. 3) Deeper capital markets are critical for increasing the availability of long-term finance, especially given the asset-liability mismatches in the banking sector. 4) The role of fintech in accelerating financial inclusion in India has been impressive, but the synergies between fintech and MSMEs has yet to be fully exploited. Fintech lenders have lower origination costs and turnaround times than traditional lenders and could help borrowers, especially MSMEs, restart business activities post lockdown. 5) It is encouraging that the government is moving to a more selective and strategic public sector footprint in the financial sector, as witnessed by the consolidation of PSBs and strengthening their corporate governance and oversight. Gradually scaling back the statutory requirement for state banks to provide liquidity, as well as the priority-sector lending policy, would be helpful to reduce market distortion. In the longer run, when the market conditions improve, a mix of private capital injections into state banks and, in some cases, full privatization could be considered.

While it is clear that economic activity has been disrupted by the COVID-19 pandemic, quantifying this disruption in real time is challenging. This report examines how two proxies for economic activity – electricity consumption and night-time light intensity – can be used to track developments and to complement more traditional measures. Electricity consumption was nearly 30 percent below normal levels at the end of March, remained a quarter below normal levels in April, 14 percent below normal in May, and was still 8 percent below normal in June. In April, night-time light intensity declined in more than two thirds of the districts and the average decline was 12 percent. These findings have implications for the trajectory of the rebound of the economy.

Finally, the COVID-19 crisis threatens to reverse the remarkable gains India has experienced in poverty reduction. The economic and distributional impacts of the crisis are likely to differ depending on the sectors where households work and the nature of work arrangements. In the absence of high-frequency data on living standards, we present a micro-simulation analysis, and an illustrative exercise to assess the short-term distributional impacts of the COVID-19 crisis. The results of such a simulation exercise can provide useful benchmarks to design specific support policies.

PART A – Recent Economic Developments

2. Real Sector

The COVID-19 shock came at a time when India's growth was already moderating. The tentative signs of a revival in economic activity, seen in the last quarter of FY19/20, have disappeared. The weakness in investment that characterized recent years is likely to persist, and consumption is also likely to moderate. While the contribution of industry to growth has fallen in recent years, services sector activity has also slowed during FY19/20. COVID-19 is affecting the real economy via multiple channels, including via the financial sector. Growth is expected to be negative in FY20/21, despite a strong policy response by the Government and the RBI.

The Indian economy is facing its biggest challenge in recent times with a blanket disruption of economic activity on a scale worse than the GFC. In response to the COVID-19 outbreak, India began proactively regulating the cross-border flows of people and goods in February and subsequently imposed an all-encompassing lockdown in phases—the first phase (March 25–April 14) witnessed a total cessation of economic activities except for those deemed “essential.” The subsequent phases were characterized by a calibrated opening of specific activities.

Initial data points to massive disruptions in economic activity. The COVID-19 pandemic and the public health responses have halted activity across sectors, triggered unprecedented risk-aversion among consumers, and are likely to fundamentally alter the way agents interact given that social distancing measures are likely to remain in place for the foreseeable future. Experience from other countries indicates that mobility and activity are unlikely to revert to their full pre-crisis extent even after the health emergency abates.

a. COVID-19 hit against the backdrop of weakening domestic activity

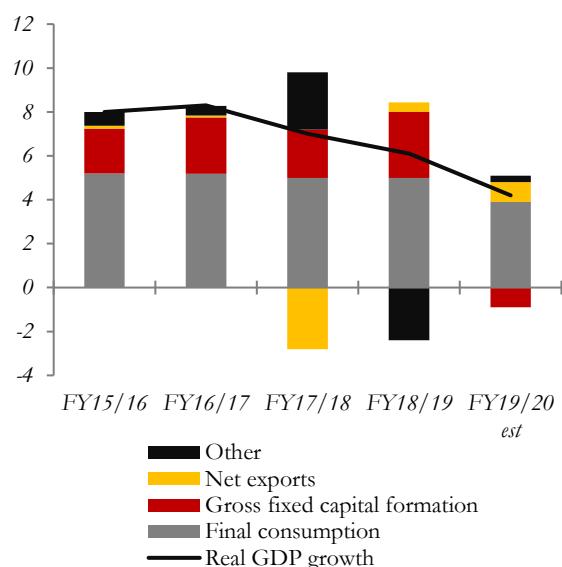
Unlike the GFC, the COVID-19 shock is not a conventional financial crisis. The initial shock materialized in the form of trade disruptions (with exports to and imports from affected countries like China being curtailed) and the cessation of tourism flows. Subsequently, as lockdowns were imposed, domestic activity ceased in large swathes of the real sector—and both formal and informal segments. Unlike the GFC that hit after years of strong growth, the onset of the COVID-19 outbreak occurred against the backdrop of weakening activity in India, and of lingering challenges in banking and non-banking channels. While investment had been subdued for years, private consumption growth had also begun to weaken. A subdued global environment – characterized by weak trade flows – had exacerbated these trends.

b. Economic growth moderated significantly in FY18/19 and FY19/20

In FY19/20, India experienced slowing growth for the third consecutive year. Real GDP growth is estimated to have eased to 4.2 percent in FY19/20, from 6.1 percent in FY18/19 (a year characterized by stress in the non-banking segment of the financial sector, due to the failure of a systemically important non-bank financial company – IL&FS) and 7 percent in FY17/18 (Figure A.1 and Figure A.2). Over the past 5 years (FY15/16–FY19/20) private consumption growth averaged 7.1 percent, although it moderated to 5.3 percent in FY19/20. Investment growth averaged 5.8 percent and contracted in FY19/20. Overall, the slowdown is characterized by (i) fluctuating investment growth and a contraction in FY19/20; (ii) relatively steady aggregate consumption growth between FY15/16 and FY18/19 but a significant moderation in FY19/20, and (iii) volatility in net exports, with a positive contribution to GDP growth in FY19/20, mostly due to a contraction in imports (reflecting weak domestic activity) (Figure A.1). These trends were reflected, on the supply side, in a steadily declining contribution to the growth of the industry sector, aggravated in FY19/20 by declining contribution from the services sector as well (Figure A.2).

Figure A.1: Private consumption remains the key driver but has not compensated for weak investment and exports

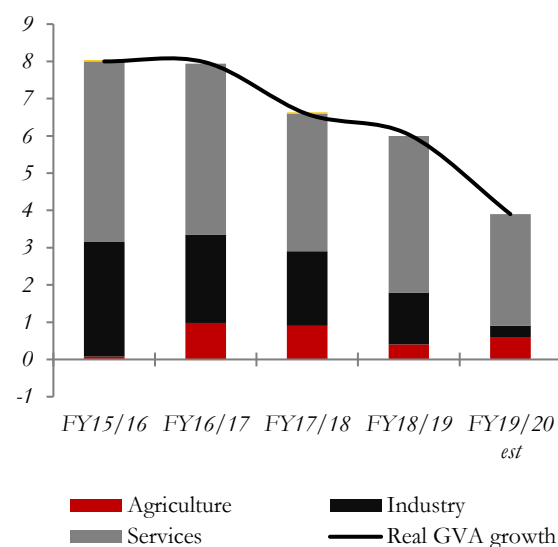
(real GDP growth, percent and contribution, percentage pts)



Source: National Statistics Office (NSO) and World Bank staff calculations

Figure A.2: The industry and services sectors have suffered over the past couple of years

(real GVA growth, percent and contribution, percentage pts)



Source: NSO and World Bank staff calculations.

c. Investment weaknesses compounded by increasingly stifled consumption growth.

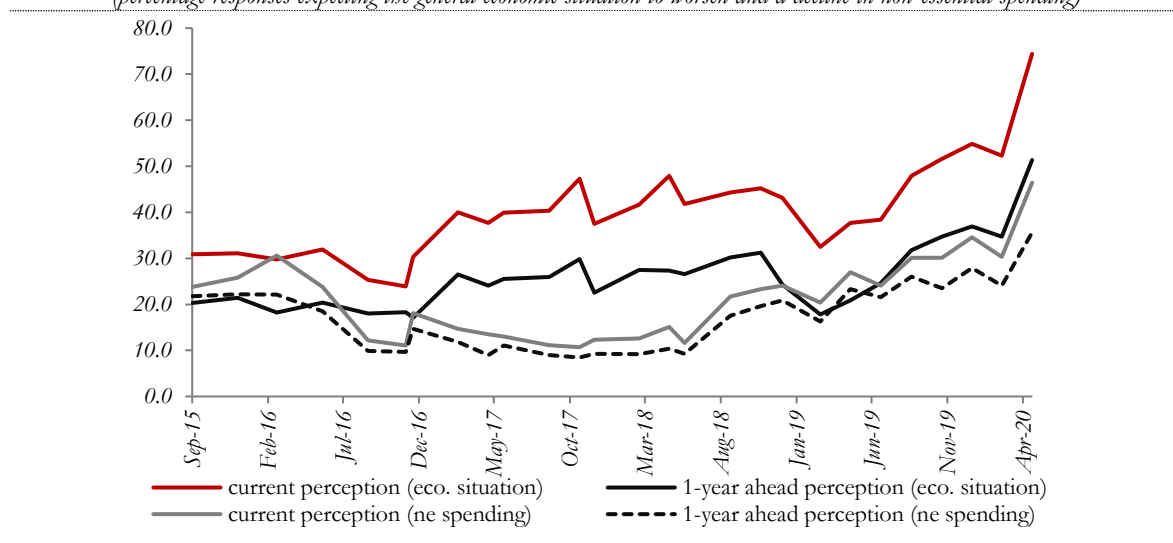
A brief rebound in FY18/19 aside, private consumption growth has moderated since FY17/18. Consumer confidence about economic conditions deteriorated significantly from late 2016, particularly after demonetization (Figure A.3 and consumer expectations survey² [RBI, June 2020]). After a period of relative stability, the outlook on non-essential spending also deteriorated June 2018 onwards. This deterioration occurred just prior to the default of IL&FS in September 2018, and the resultant financial stress that affected the entire sector (with a few large NBFCs also defaulting on payments subsequently) (Figure A.3). The onset of the sustained moderation in private consumption expenditure coincided with this dampening of consumer spending sentiment and subsequently with a sharp moderation in real rural wage growth since early 2019 (Figure A.15 below). It continued until Q1 FY19/20 (Figure A.4), and briefly recovered during Q2 and Q3 before weakening again in Q4, when overall growth moderated to 3.1 percent yoy (Figure A.4). Given that services account for around 50 percent of private consumption expenditure, the subdued spending outlook does not augur well for non-agrarian sectors. With the onset of COVID-19 and the resultant negative impact on disposable household incomes, it is unlikely that private consumption will recover quickly.

The moderation in private consumption growth over the past years has been compensated to some extent by public consumption (approximately 15 percent of total consumption). Indeed, the growth of public consumption expenditure has been faster than that of private consumption, with a pick-up since Q4 FY18/19 broadly coinciding with the moderation in private consumption growth. There was, however, a moderation in public consumption growth during Q1 FY19/20 (Figure A.4 and Figure A.5).

² The latest round was conducted by the RBI via telephonic interviews over May 5-17 spanning 5300 households in 13 major cities; Ahmedabad, Bengaluru, Bhopal, Chennai, Delhi, Guwahati, Hyderabad, Jaipur, Kolkata, Lucknow, Mumbai, Patna, and Thiruvananthapuram.

Figure A.3: Household perceptions of the general economic situation and outlook on (non-essential) spending had worsened even before the advent of COVID-19

(percentage responses expecting the general economic situation to worsen and a decline in non-essential spending)



Source: RBI

Figure A.4: Private consumption growth has moderated since Q2 FY18/19

(real, percent yoy)

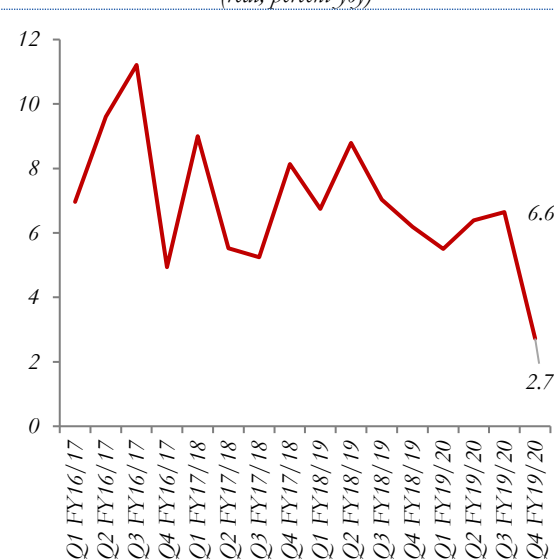
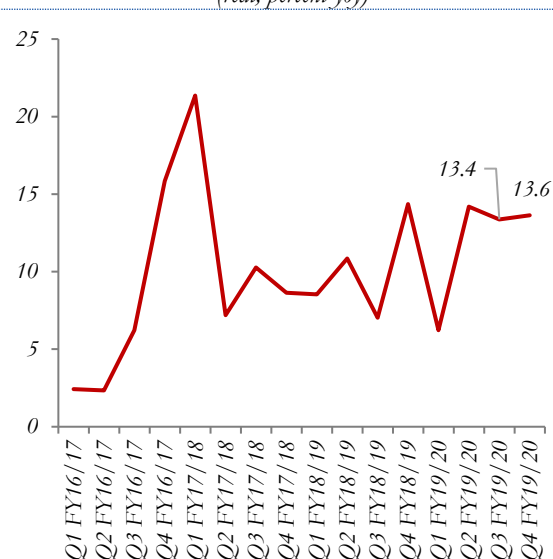


Figure A.5: Public consumption growth has remained steady

(real, percent yoy)



Investment growth has turned negative in FY19/20. Growth in gross fixed capital formation remained steady between Q3 FY17/18 and Q3 FY18/19 but subsequently collapsed and turned negative over the last three quarters of FY19/20 (Figure A.6). Overall, low rates of investment growth are manifested in weak credit uptake from banks and reflect the lingering impact of the “twin balance sheet” problem³, the resolution of which is still a work-in-progress. In addition, financial stress in the NBFC sector (following the IL&FS default in September 2018) suggests that the non-banking financial sector is also not immune to the difficulties that banks faced since the GFC. Consequently, as NBFCs began to experience financing bottlenecks, credit growth in the commercial sector fell sharply in FY18/19 and FY19/20.

Slowing activity both at home and abroad was reflected in a decline in import and export growth since the second half of 2019. Export growth moderated sharply from Q4 FY18/19 onwards, as the global outlook became more uncertain and weaknesses in the financial sector began to affect domestic

³ Unresolved instances of high corporate indebtedness coupled with NPA burden of public sector banks.

firms. Growth in imports declined steadily over this period, as domestic activity slowed, oil prices softened from October 2018 onwards, and import duties were raised on certain commodities (Figure A.7).

The declining trend in exports and imports is expected to be exacerbated by the onset of COVID-19. Exports are projected to decline further, as global demand remains weak and domestic supply chains disruptions remain to some extent. Imports are expected to remain weak due to subdued domestic activity. Data for March 2020 indicate a 35 and 29 percent decline yoy in exports and imports, respectively, in nominal terms (see section 3 for a detailed discussion).

Figure A.6: Investment growth has turned negative
(real, percent yoy)

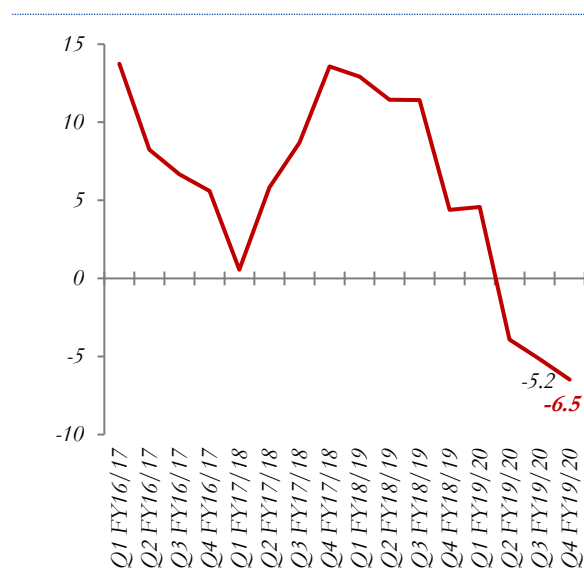
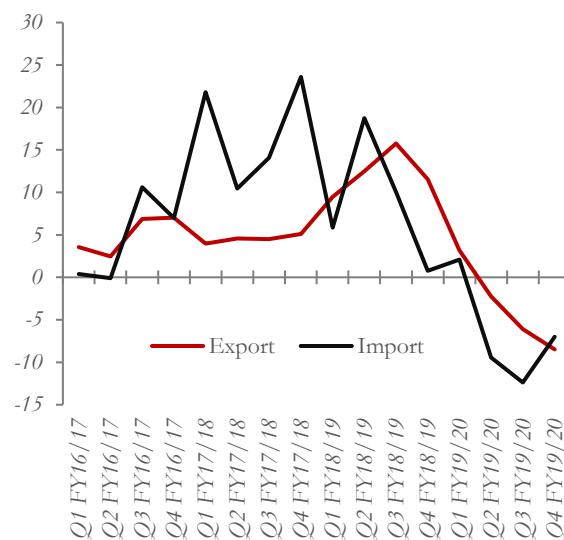


Figure A.7: Imports have contracted faster than exports as domestic activity has weakened
(real, percent yoy)

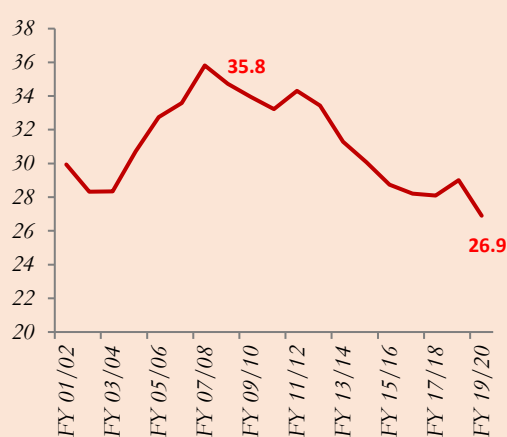


Source: NSO and World Bank staff calculations

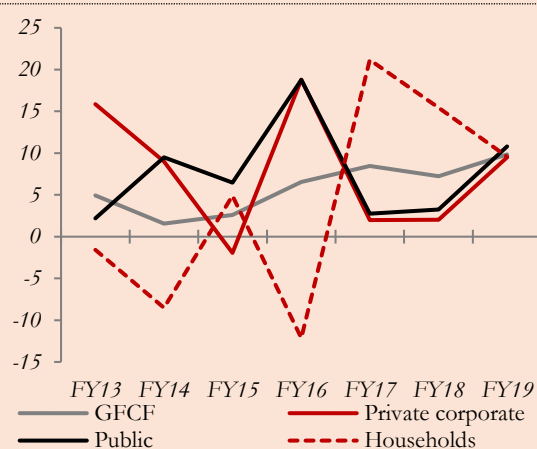
Box A.1: India's post-GFC domestic investment and saving situation

The growth “boom” during India’s “dream run” in the mid-2000s was driven by the private corporate sector (Nagaraj, 2013⁴). India’s investment rate climbed to about 36 percent of GDP prior to the GFC (Figure A.8), financed primarily by credit from PSBs. As the GFC depressed economic activity and future revenue flows, a significant number of private projects became unviable. As private indebtedness increased, the balance sheets of public banks deteriorated markedly and non-performing assets (NPA) ballooned. The resulting “twin balance sheet” (TBS) problem—impaired balance sheets of private corporates as well as public banks—induced risk aversion and depressed the flow of credit (Economic Survey, 2016-17). The extent of the TBS problem only became fully clear in 2015, following the RBI’s Asset Quality Review (Figure A.11) and resolution was delayed. It remains a work in progress, despite the ratio declining over the past two years.

Gross fixed capital formation as a share of GDP in nominal terms declined by 9 percentage points between FY07/08 and FY19/20 (Figure A.8).

Figure A.8: Gross fixed capital formation*(nominal, percent of GDP)*

Source: NSO.

Figure A.9: Growth in fixed investment*(real, percent)*

Source: NSO.

The growth rate in *real* private investment over FY12/13 and FY18/19 averaged at about 8 percent compared to about 18 percent over FY05/06 to FY11/12⁵. Peaks in private corporate investment growth in recent years have mostly coincided with peaks in public investment growth, while remaining subdued in other years (Figure A.9). Figure A.6 above shows that the uptick in GFCF witnessed in FY18/19 has not been sustained. That (private) investment has remained subdued in recent years is borne out by trends in other *real* indicators of investment that are compiled outside the national accounts:

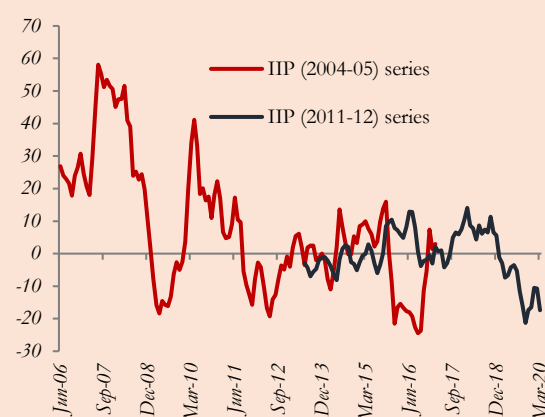
Production of capital goods: Data from the old index of industrial production (IIP) capital goods (that is available up to March 2017) shows that the average growth rate over FY12/13 to FY16/17 has been negative, at 3.0 percent vis-à-vis an average of 17.1 percent over FY06/07 to FY11/12. Data for the new series of IIP (base 2011-12) also indicates that growth in the production of capital goods over FY12/13 and FY19/20 has been negative – 0.4 percent on average (Figure A.10).

⁴ Nagaraj, R., “India’s Dream Run, 2003-08: Understanding the Boom and Its Aftermath”, Economic and Political Weekly, Vol. 48(20), May 2013.

⁵ The break-up of investment into public and private is not available for FY19/20.

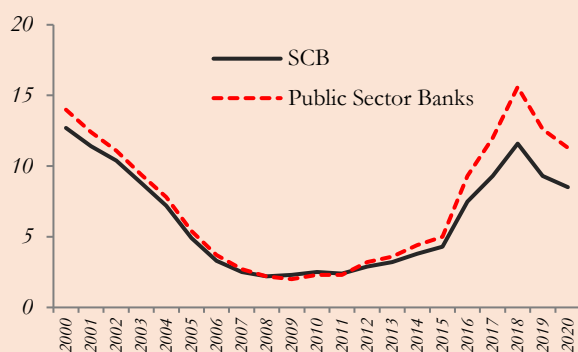
Bank credit: Post GFC, credit growth continued to be robust for a while, possibly reflecting expectations of a strong growth rebound. However, following a series of steps by the government and the RBI (including the Asset Quality Review conducted during FY15/16), the magnitude of the TBS problem began to emerge. As the NPA ratio of PSBs increased sharply from FY15/16 onwards (Figure A.11), credit to industry suffered (compared to the services sector that was less affected). Credit to industry registered negative growth rates in real terms from late 2015 onwards (Figure A.12). The micro, small, and medium segments of industry were hit particularly hard by the ensuing credit crunch.

Figure A.10: Capital goods production has moderated
(percent, yoy, 3mma)



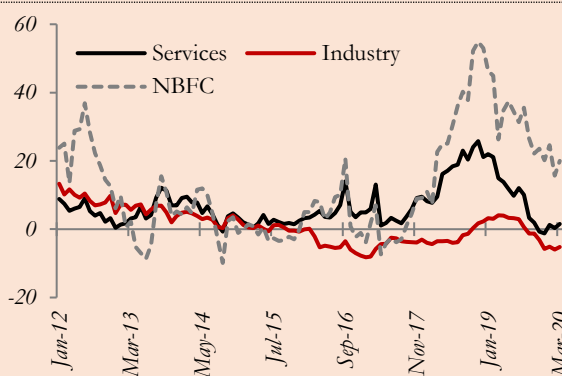
Source: Ministry of Statistics and Programme Implementation (MOSPI).

Figure A.11: Gross NPA declined over the past two years, but stay elevated...
(percent of gross advances)



Source: RBI.

Figure A.12: ...while bank credit growth has eased
(real, percent yoy)



Source: RBI.

The risk is that the COVID-19 shock will further delay the resolution of the TBS problem while potentially creating new stress-points in the financial system. Even if outright bankruptcy can be avoided, firms in most sectors are likely to see an extended period of weak demand and, additionally, a number of logistics-related issues over the short run (for example, increased costs for re-establishing operations or resuming production post lockdown to meet enhanced health-related and social-distancing norms). These factors make it unlikely that there will be swift return to “business as usual,” thereby clouding prospects of a swift restoration of the investment cycle.

Gross Domestic Saving

The bulk of the financing for investment is from domestic sources. India’s domestic saving rate has declined by more than 4 percentage points over the past 7 years, yet it remains higher than most comparable emerging market and developing economies.

The decline in gross saving between FY11/12 and FY18/19 (by 4.5 pp) has been driven by a 5.5 percentage points decline in household saving, counterbalanced only marginally by an increase in saving by the private corporate sector (by about 1 percentage points), with saving by the public sector remaining broadly unchanged (Table A.1). However, the bulk of the decline in household saving over the past 7 years has been on account of lower physical savings, particularly in physical assets. This fall, however, did not translate into a sustained rise in net financial saving, which is more relevant for the purpose of capital formation since household financial liabilities have increased in recent years.

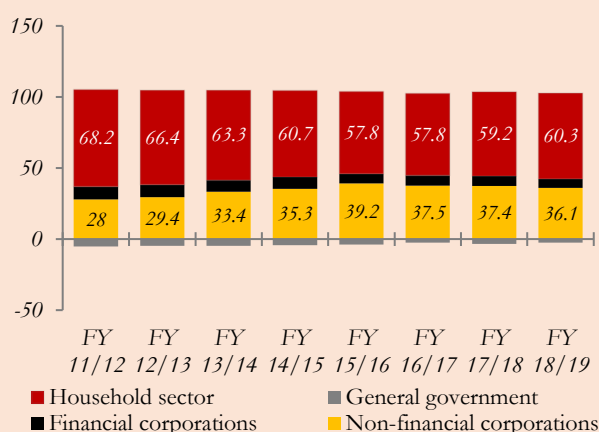
While updated estimates of saving for FY19/20 will be released by the NSO in January 2021, estimates of households’ financial assets and liabilities based on quarterly data, released in the RBI Bulletin (June 2020), indicate that net financial assets of households have increased to 7.7 percent of GDP in FY19/20 from 7.2 percent in FY18/19.

Table A.1: Component-wise saving (% of GDP)

	FY11/ 12	FY12/ 13	FY13/ 14	FY14/ 15	FY15/ 16	FY16/ 17	FY17/ 18	FY18/ 19
1. Gross saving (a+b+c)	34.6	33.9	32.1	32.2	31.1	31.3	32.4	30.1
a. Public sector	1.5	1.4	1.0	1.0	1.2	1.7	1.7	1.5
b. Private corporate sector	9.5	10.0	10.7	11.7	11.9	11.5	11.6	10.4
c. Household sector	23.6	22.5	20.3	19.6	18.0	18.1	19.2	18.2
i. Net financial saving	7.4	7.4	7.4	7.1	8.1	7.4	7.7	6.5
Gross financial saving	10.7	10.7	10.6	10.1	10.9	10.5	12.1	10.5
Less financial liabilities	3.3	3.3	3.2	3.0	2.8	3.0	4.3	4.0
ii. Physical saving	16.3	15.1	12.9	12.5	9.9	10.7	11.4	11.7
of which physical assets	15.9	14.7	12.6	12.1	9.6	10.4	11.2	11.5

Source: NSO.

Although households remain the primary suppliers of saving for the purposes of capital formation, their share has declined from nearly 70 percent in FY11/12 to around 60 percent in FY18/19 (Figure A.13). The share of financial corporations has also declined from 9 percent in FY11/12 to 6.2 percent in FY18/19. India has a high rate of saving on aggregate, but if it co-exists with a subdued share of net household financial saving, mobilizing finances for investment, especially long-term investment, will remain complicated going forward.

Figure A.13: Finances for capital formation
(% of gross saving)

Source: RBI and MOSPI.

d. Contrasting fortunes on the supply side: a rebound in the agriculture sector, a sharp slowdown in the industrial sector and a moderation in services

Agriculture growth rebounded in FY19/20 after slowing in FY18/19 (Figure A.14). The rebound happened on the back of a steady monsoon (rainfall over June–September 2019 was 110 percent of the long-period average) and the lagged effect of income support schemes for farmers (extended by the central government and a few state governments).

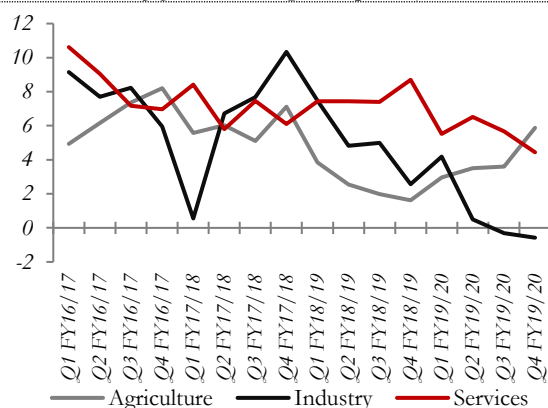
Rural wages have moderated. Wage labour is estimated to constitute about 43 percent of the average monthly income of rural households⁶. A sustained fall in real rural wages of workers, in both agricultural and non-agricultural occupations, was witnessed between July 2017 and July 2018. This was followed by a moderate increase in both categories until January 2019, which has subsequently reversed. Data available until March 2020 indicate that real wage growth in both segments remain in negative territory despite some improvement in early 2020 (Figure A.15). This trend has been accompanied by a sustained fall in food

⁶ According to the National Bank for Agriculture and Rural Development (NABARD) All India Rural Financial Inclusion Survey 2016-17, wage labour is estimated to constitute 34 and 54 percent of the average monthly income of agricultural and non-agricultural households respectively.

prices between Q4FY17/18 and Q4FY18/19. Data on fast moving consumer goods (FMCG) compiled by Nielsen showed a sharp slowdown in rural consumption to a 7-year low during Q2 FY19/20⁷.

Figure A.14: Agriculture growth is on a rebound, industrial growth has turned negative, while services growth has moderated

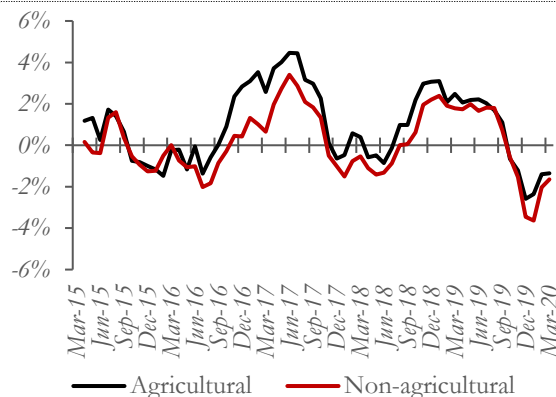
(yoy real GVA growth, percent)



Source: NSO.

Figure A.15: Real rural wage growth has turned negative

(%, yoy, combined men and women)

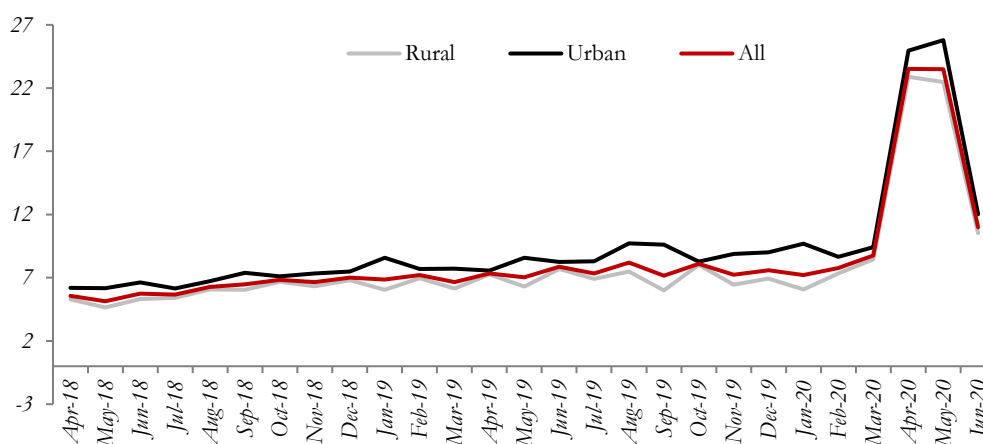


Source: Labour Bureau.

Note: Does not include data on all occupation codes for women.

Figure A.16: Unemployment rate touched a historic high in May 2020

(monthly, percent)



Source: CMIE.

The COVID-19 outbreak led to a spike in both rural and urban unemployment. Data from the Centre for Monitoring Indian Economy (CMIE) suggests that unemployment increased marginally in both rural and urban areas between April 2019 and March 2020, but spiked to above 20 percent in April and May as the lockdowns were imposed (Figure A.16: **Unemployment rate touched a historic high in May 2020**). Even with a sharp decline in the unemployment rates in June, it remains to be seen if it can be sustained at these levels in the coming months. Rising unemployment is expected to subject a large number of households to income shocks.

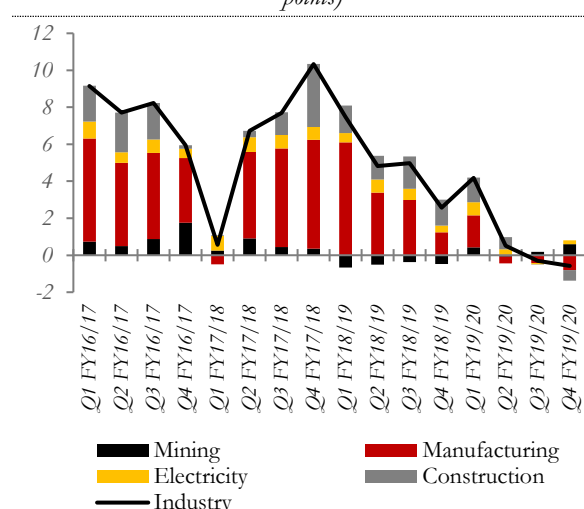
Industrial growth has declined sharply since Q4 FY17/18 and turned negative during the second half of FY19/20 (Figure A.17). This reflects the mutually reinforcing effects of weakening demand and financial sector stress. Specifically, the stress in the NBFC sector post Q2 FY18/19 has affected housing

⁷ Please refer to the Livemint report <https://www.business today.in/current/economy-politics/fmcg-rural-growth-lowest-in-7-years-nielsen-report-poor-farm-income-pulls-down-retail-sales/story/385428.html>.

finance companies and, in turn, the real estate sector. Small and medium firms, which rely significantly on NBFCs, have faced an additional credit crunch. The financial stress on firms, including MSMEs⁸, has adversely affected investment and manufacturing growth⁹. Weak manufacturing activity is also reflected in a moderation in electricity generation. The rate of growth of electricity generation was over 3 percentage points lower on average between Q1 FY18/19 and Q4 FY19/20, compared to the eight prior quarters. As a result, the contributions of construction, manufacturing and electricity generation to industrial growth have declined (Figure A.17). Given increased uncertainty post-COVID-19, it is unlikely that there will be a quick revival of manufacturing or mining in the near-term. Sectors like construction that have been impacted by social-distancing norms and labour shortage during the lockdown (given the exodus of migrant labour away from large cities) also face challenges in resuming activities quickly.

Figure A.17: The manufacturing sector weakened significantly in FY19/20

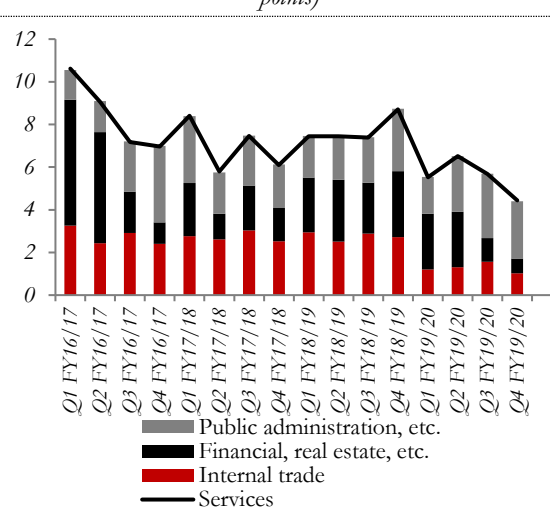
(yoy real growth in industry in percent, contribution in percentage points)



Source: NSO and World Bank staff calculations

Figure A.18: Contribution of internal trade and financial services to services growth have fallen

(yoy real growth in services in percent, contribution in percentage points)



Source: NSO and World Bank staff calculations

The impact of COVID-19 on industry is expected to be severe, as the sector was already under stress. The manufacturing sector has faced the brunt of the first-round effects of the pandemic (as imports of key intermediates suffered) and is likely to be impacted further by second-round effects in the form of demand shocks. The industrial sector accounts for 25 percent of total employment and in sub-sectors such as manufacturing and construction a majority of usually working persons are either self-employed or casual workers. Unemployment will entail income losses not only for urban households but also for rural agricultural households that supply migrant labour to cities in these activities.

The services sector is also witnessing a major disruption. Growth in the services sector (which accounts for around 32 percent of total employment) moderated in FY19/20. Over the past 4 years, there was a decline in the contribution of the “financial, real estate, and business” and “internal trade, hotels, and transport” subsectors in aggregate services growth. By contrast, the contribution of “public administration, defence, and other services,” which reflects government spending, has remained relatively steady, especially over FY19/20 (Figure A.18). With the onset of COVID-19 and the ensuing lockdown essentially freezing tourism and mobility, the hotel, restaurants, transport, and internal trade subsegments of services have been

⁸ Around 67 percent of MSMEs are estimated to be engaged in manufacturing and trade-related activities (Annual Report 2018-19, Ministry of Micro, Small and Medium Enterprises, Government of India).

⁹ Media reports, in early June, of a survey conducted by the All India Manufacturers' Organization comprising 46,000 responses from various industry groups indicated that businesses of nearly 35 percent of MSMEs were severely affected in the wake of the COVID-19 pandemic. Please refer to the link <https://economictimes.indiatimes.com/small-biz/sme-sector/over-one-third-msmes-start-shutting-shop-as-recovery-amid-covid-19-looks-unlikely-aimo-survey/articleshow/76141969.cms> accessed on June 8, 2020.

affected the most. In contrast, financial, real estate, and business services are expected to be impacted to a lesser extent since some of these activities could be sustained online or remotely.

e. COVID-19 is disrupting economic activity through a variety of channels

The economic impact of the COVID-19 pandemic stemmed initially from external sources. In early 2020, the first impact was on global trade flows, particularly trade with China. Subsequently, the external shock was transmitted to the domestic economy due to two developments: (i) precautionary steps undertaken to contain the virus, which stalled domestic economic activity (a supply shock) and (ii) a demand shock, due to the effect of the supply headwinds on household and firm incomes. The policy response by the government and the RBI has been strong (please refer to Box A.3 for details on the economic stimulus as well as section 5 for the various steps undertaken by the RBI and other regulatory agencies).

Real-time data¹⁰ indicate that the decline in mobility in India (since the lockdown on March 25) was larger than in a few comparable countries but has been picking up since April (Figure A.19 and Figure A.20). This data needs to be interpreted with caution given that the health impact unfolded differently within countries and each adopted a unique set of policies to counter the pandemic¹¹. Nonetheless, the data points to an increase in mobility in India in since mid-April as the lockdown was incrementally eased and a return to baseline since mid-June. This pick-up seems most likely to be mobility for mostly essential purposes, with the index for travels for grocery and pharmacy reverting to baseline as opposed to transit stations.

Figure A.19: The impact on mobility in India has been higher than some comparable economies

(Google mobility trends, travel to grocery & pharmacy, percentage change from baseline)

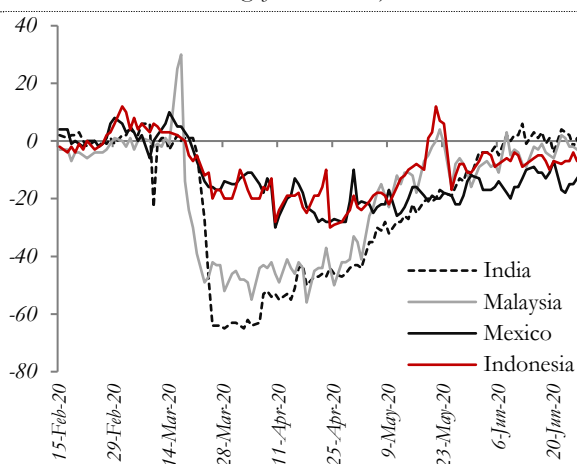
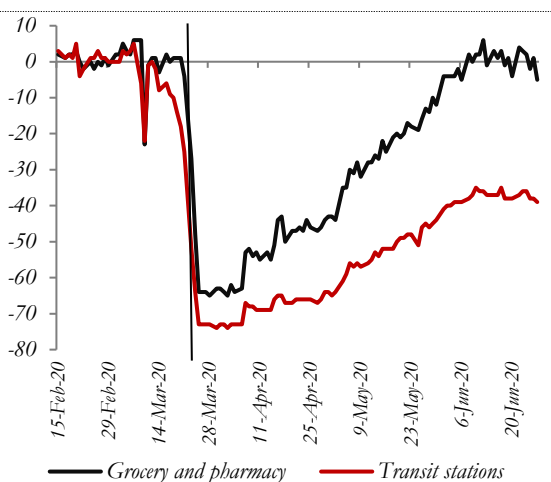


Figure A.20: The mobility indices indicate a pick-up in mobility in India since April

(Google mobility trends, percentage change from baseline)



Source: Google LLC "Google COVID-19 Community Mobility Reports". <https://www.google.com/covid19/mobility/> Accessed: June 2020.
The vertical line in Figure A.20 indicates the start of the nationwide lockdown.

The economic effects of the pandemic are still unfolding. COVID-19 is believed to be impacting the economy via the following channels:

- In the first round, activity in firms dependent on imports from China were impacted. Similarly, exporting firms have been hit due to a disruption in international supply chains.

¹⁰ Available from Google, Inc. since mid-February. This data tracks movements of individuals for certain activities—travel to groceries and pharmacy, transit stations and the workplace.

¹¹ A decline in mobility may not correspond one-on-one with a decrease in economic activity since some activities shifted to home-based work.

- Subsequently, the lockdown halted domestic operations (procurement, production, and marketing) in many sectors/businesses, across industrial and services sectors. Operations in businesses that remained open to deliver essential services were curtailed.
- These developments have disrupted domestic supply chains and impacted household incomes and spending.
- Aggregate output is expected to decline as businesses curtail production and household incomes shrink. This will, in turn, negatively impact taxes and government revenue.
- This chain of events led to increased unemployment (Figure A.16: **Unemployment rate touched a historic high in May 2020**) and can lead to business bankruptcies that could trigger a vicious cycle of further demand contraction.

The disruption in the domestic supply chain occurred immediately after the first phase of the lockdown. According to the All India Motor Transport Congress (AIMTC), daily movement of trucks collapsed to below 10 percent of normal levels in early April¹². Data on the electronic way (E-Way) bills¹³ published by the GST network (GSTN) show that only 40.6 million and 8.6 million E-Way bills were generated during March and April 2020, compared to more than 57 million in February. With the cautious easing of mobility restrictions, there is a gradual restoration of transportation, with the number of issuances climbing to more than 25 million in May and 43 million in June.

Figure A.21: Moderation is noticed in growth of card transactions and inter-bank payments

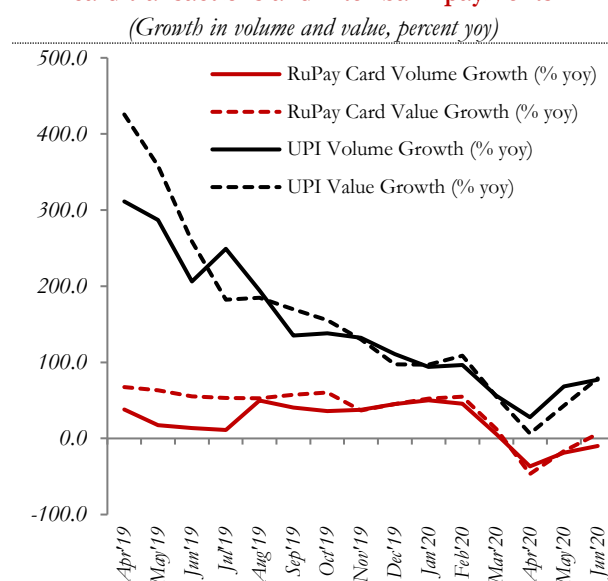
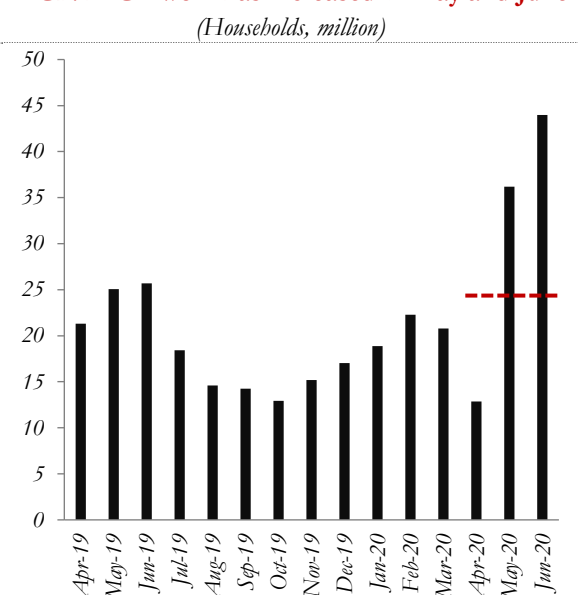


Figure A.22: Number of households demanding MGNREGA work has increased in May and June



Source: National Payments Corporation of India, Ministry of Rural Development.
The red dotted line denotes the average for the first quarter for the past 5 years.

There are signs that aggregate demand has weakened further. Latest data from the RBI indicates a pick-up in growth in currency with the public from March 2020 onwards. However, the growth in the volume (and the value) of transactions using the RuPay card (for point-of-sale as well as e-commerce purposes) declined significantly over March and April (Figure A.21). A similar trend is seen in inter-bank money transfers via the Unified Payments Interface (UPI) application. The spike in demand for work from households under the rural employment guarantee scheme (MGNREGA) over May and June possibly

¹² Please refer to the report in the Economic Times https://www.business-standard.com/article/economy-policy/90-of-trucks-in-india-are-now-off-roads-amid-coronavirus-lockdown-120040800048_1.html accessed on May 28.

¹³ E-Way bills are electronically generated bills, required under the GST regime, for vehicular movement of goods between two destinations, typically of value exceeding INR 50,000 for most goods.

reflects attempts to cushion income shocks arising from loss of employment opportunities elsewhere (Figure A.22 and).

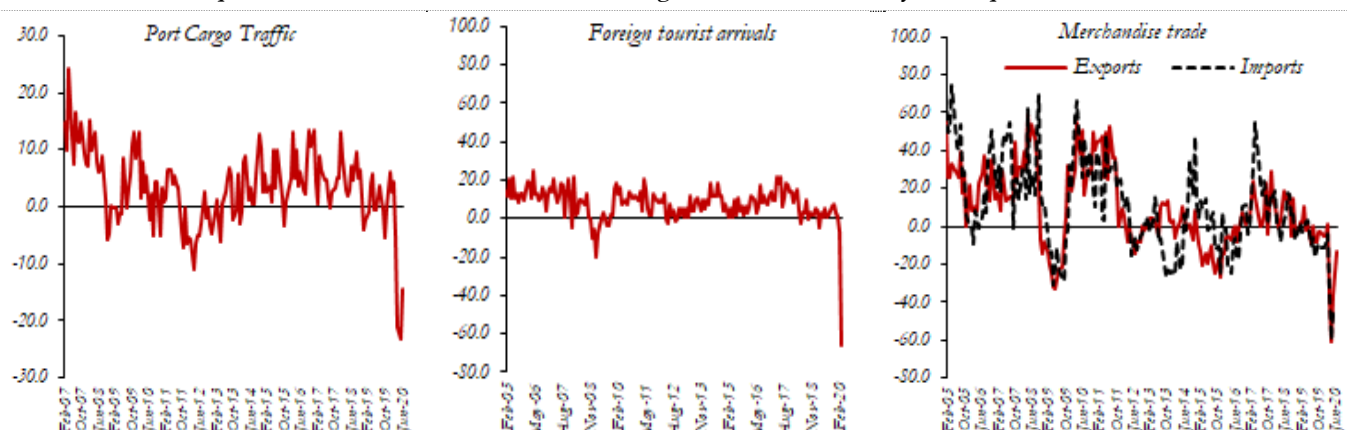
High-frequency indicators capture the devastating impact on the economy, especially in April.

Figure A.23 summarizes the trends in a few macro-indicators in real terms. The immediate impact of COVID-19 was initially evident via external channels (tourist inflow and trade) while the pervasive impact on domestic indicators seems to have set-in once the lockdown was announced in late March. In particular:

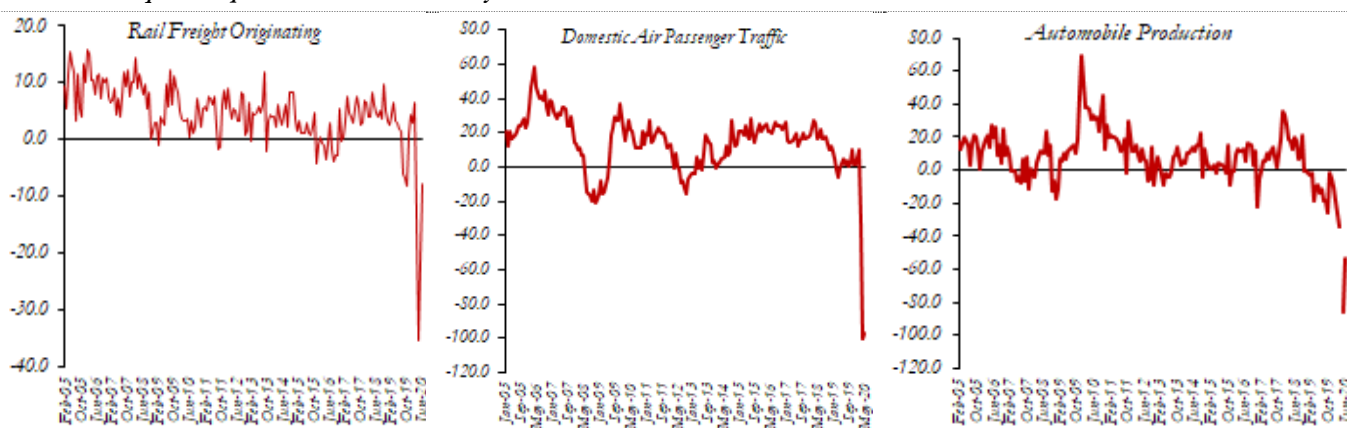
- The initial shock materialized in the form of international supply chain disruptions as witnessed in the 22 percent year-on-year contraction in port cargo traffic, on average, in April and May, reflected in turn in a contraction of around 50 percent in both export and import over the same period.
- Reflecting the cumulative steps to filter inflow of travellers from abroad since late January, foreign tourist arrivals contracted by more than 66 percent in March.
- Subsequently, as the lockdown took hold, rail freight and consumption of diesel contracted respectively by more than 35 and 55 percent in April as domestic mobility came to a standstill.
- Domestic mobility restrictions have hit the industrial sector particularly hard. The large contraction in production volumes (for example, of steel and automobiles) is reflected in the 18.3 percent year-on-year contraction in the overall index of industrial production in March.

Figure A.23: Growth (percent, yoy) in high-frequency indicators show the unprecedented impact of COVID-19

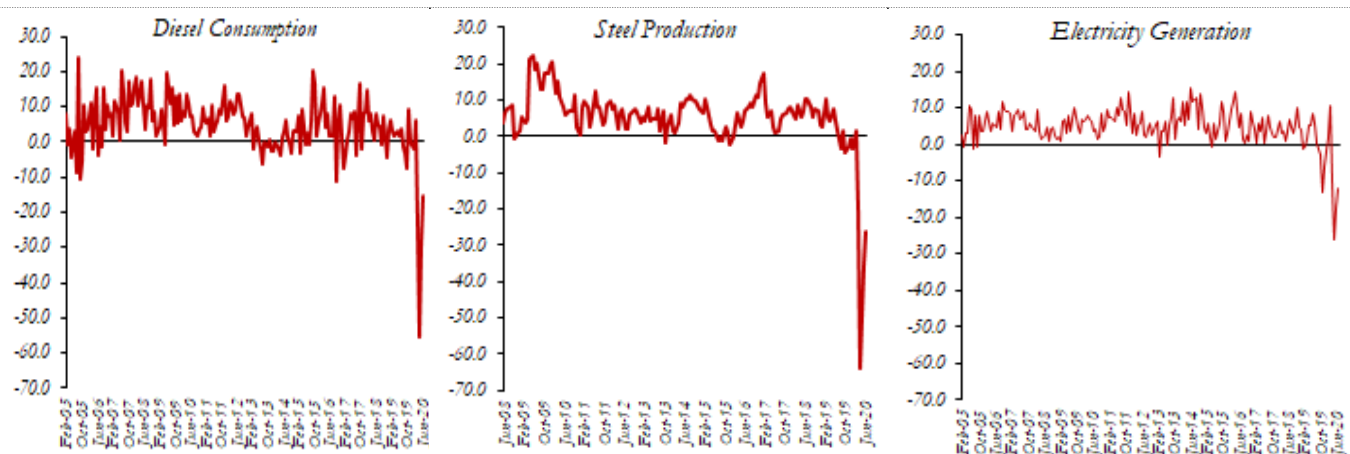
The first round of impacts was in the form of external shocks as global trade and mobility dried up...



...with subsequent impact on domestic mobility...



...and economic activity



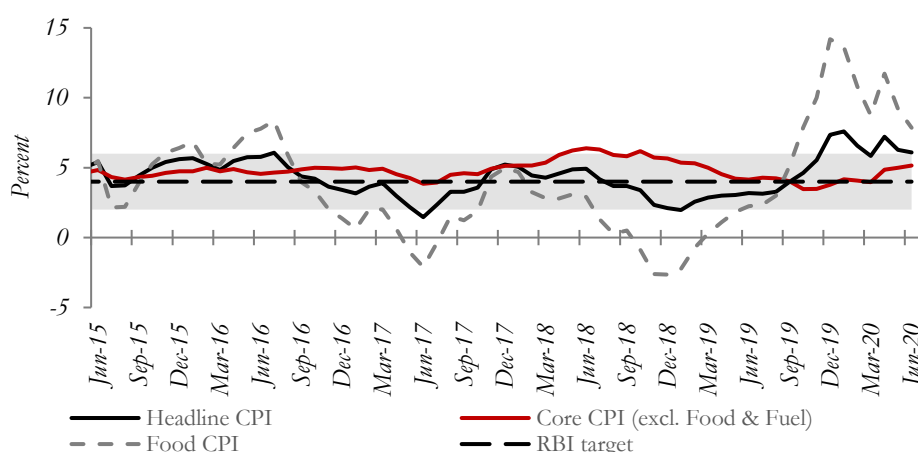
Source: CEIC. At the time of publication, data on foreign tourist arrivals is only available up to March 2020. Data on automobile production is not available for April 2020 and for domestic air passenger traffic was available up to May 2020.

3. Inflation

Headline inflation increased in FY19/20 compared to FY18/19 driven by a surge in the prices of certain food items, especially vegetables. In contrast, core inflation was weaker in FY19/20 compared to FY18/19. Wholesale price inflation also slowed and began diverging from consumer price inflation in FY19/20 with a fall in the demand for manufactured products. Consequently, in view of a slowdown in demand and the economy in general, the RBI continued to maintain an accommodative stance since June 2019. Since March 2020, the COVID-19 pandemic has severely exacerbated the pre-existing fall in aggregate demand. Following an initial spike in prices due to supply chain disruptions, the lockdown has depressed incomes and aggregate demand, and led to a sharp increase in unemployment.¹⁴ Consequently, inflation is expected to fall.

Headline inflation increased in FY19/20 compared to FY18/19. Headline Consumer Price Index (CPI) inflation in FY19/20 averaged 4.8 percent, compared to 3.4 percent in FY18/19.¹⁵ The pick-up in inflation in FY19/20 was driven by a surge in food inflation, which accounts for 40 percent of the combined national CPI basket. Food inflation increased to double digit figures between November 2019 and June 2020, peaking at 14.2 percent in December 2019, the highest in the past 6 years (Figure A.24). As a result, except for March 2020, headline inflation exceeded the upper bound (6 percent) of the RBI target for all the months between December 2019 and June 2020. The COVID-19 pandemic, however, has severely affected aggregate demand. Following an initial spike in prices due to supply chain disruptions, the lockdown has depressed incomes and aggregate demand and led to a sharp increase in unemployment. Consequently, inflation is expected to fall.

Figure A.24: Headline inflation picked up during November 2019 and June 2020 due to rising food inflation



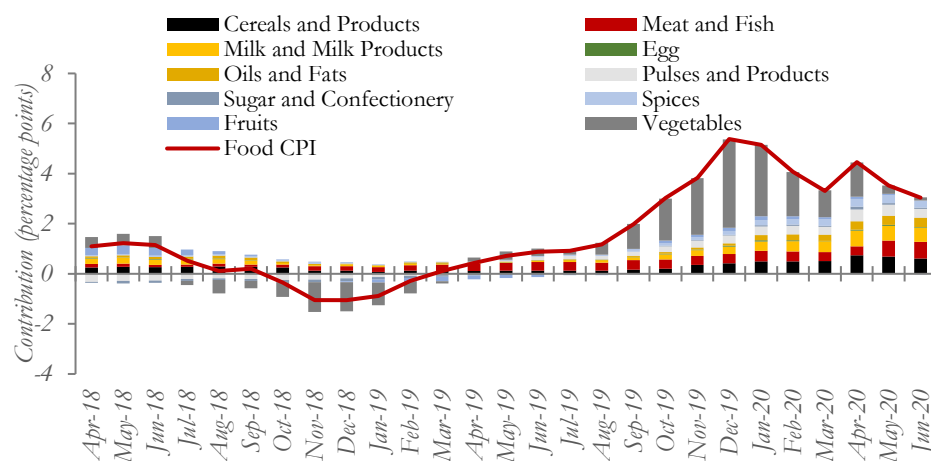
Note: Authorities did a partial release of price indices for April 2020 due to COVID-19.

Source: MoSPI, India

The sudden surge in food inflation was driven by a spike in onion prices. Vegetable prices, which often experience large volatile swings, grew at double-digit rates as of September 2019 (Figure A.25). The price of onions skyrocketed in the second half (H2) FY19/20 due to the late arrival of the monsoon and excess rains in major onion-producing states (such as Karnataka, Gujarat, and Maharashtra) that resulted in massive crop damage. To check the rise in price, the government temporarily instituted curbs on export of onion from September 2019 to mid-March 2020. Food prices excluding vegetables, which tend to have more sustained effects on food inflation, also firmed during this period, especially those of cereals, meat, milk and oils.

¹⁴ The nationwide lockdown to reduce the spread of COVID-19 was enforced in Q1 of FY 20/21 from end-March to end-June 2020.

¹⁵ Average monthly year on year inflation.

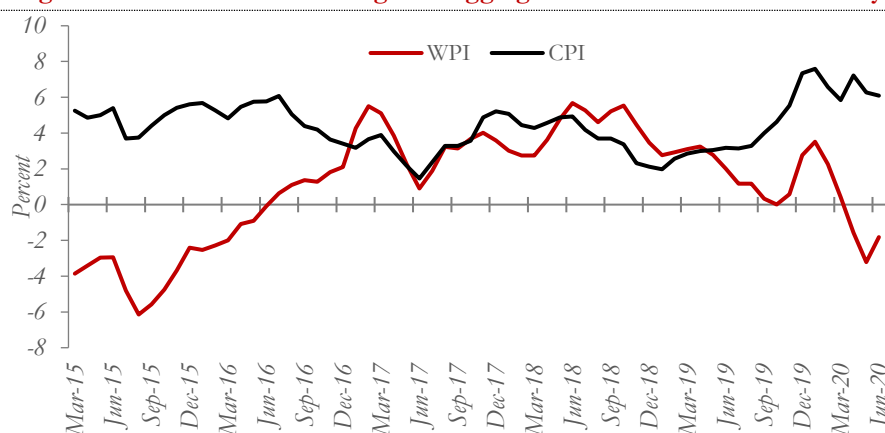
Figure A.25: Vegetable prices particularly onion prices, contributed to the pick-up in food inflation

Note: Data for April 2020 excludes data for subgroups "Meat and Fish" and "Prepared meals, snacks, sweets etc."

Source: MoSPI, India and WB calculations

In contrast, core inflation was weaker in FY19/20 compared to FY18/19. Core inflation (CPI excluding food, fuel and light) moderated steadily until October 2019 (to 3.5 percent), after peaking in June 2018 (6.4 percent).¹⁶ The trend stabilized after October 2019. Consequently, average core inflation was lower in FY19/20 at 4.0 percent, compared to that in FY18/19 (5.8 percent). Given moderating core inflation and to support flagging growth, the monetary policy stance remained accommodative since June 2019.

CPI and WPI inflation started to diverge in FY19/20, with a fall in the demand for manufactured products. CPI and WPI inflation started diverging from July 2019 (Q2 FY19/20) after tracking each other closely for the past 3 years (Figure A.26). Between November 2016 and June 2019, the average differential between the two measures was just 0.07 percentage points. In contrast, the average difference from July 2019 to June 2020 increased considerably to 5.2 percentage points. Manufactured goods have a 64 percent weight in the WPI, while food is the largest component in the CPI index. Thus, the divergence most likely reflected weakness in the demand for manufactured goods, although some of the difference could be attributable to increasing trade and transportation margins. The fall in demand for manufactured goods, which is relatively more income-elastic than food, is also in line with weak consumption, as the economy slowed sharply in FY19/20.

Figure A.26: WPI and CPI diverged as aggregate demand fell in the economy

Source: MoSPI, India

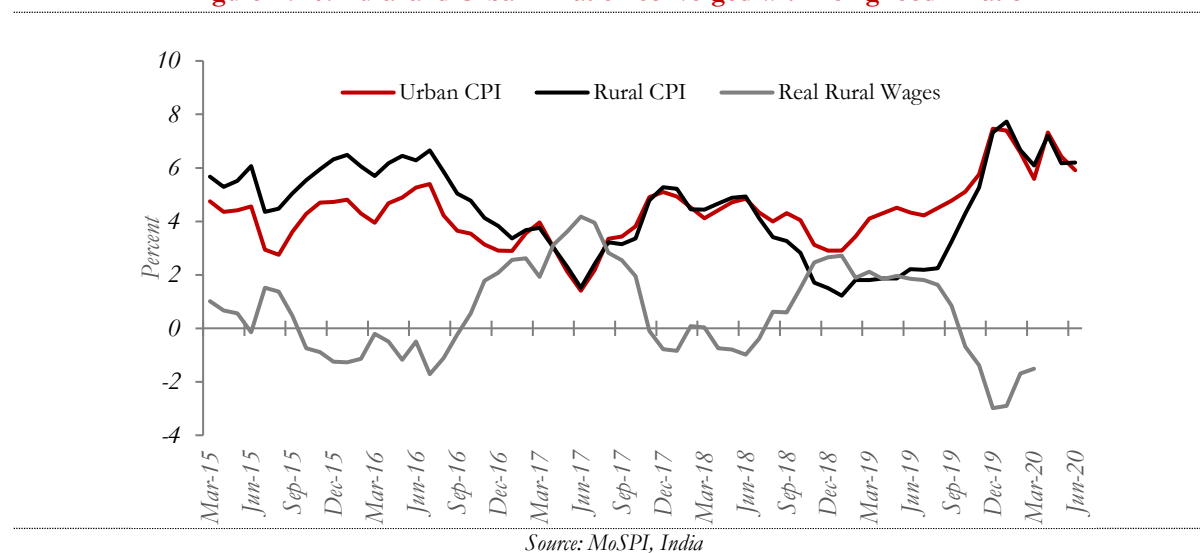
¹⁶ Core CPI is defined as CPI excluding "food and beverages" and "fuel and light". It is a weighted average of "pan tobacco and intoxicants", "clothing and footwear", "housing" and "miscellaneous" sub-categories of the CPI.

In recent months (February to June 2020) headline inflation has started to decline, driven largely by a moderation in vegetable prices. The pace of increase in vegetable prices moderated to 1.9 percent in June 2020 since reaching a high of above 60 percent in December 2019. However, the prices of other food product groups have declined only marginally. In April 2020, food prices increased due to supply chain disruptions following the country-wide lockdown¹⁷.

Core inflation has recently firmed up. The upward trajectory in core inflation since December 2019 was predominantly driven by increases in the price of telecommunication services with the more recent push coming on the back of rising commodity (gold and silver) prices as well as an increase in taxes on intoxicants. The three largest private telecom service providers that service Indian customers were engaged in increased competition in a bid to gain market share. While this led to unprecedented low charges for call and data services, it also led to record losses for these telecom firms in Q2 2019. Thereafter, the firms hiked prices between 15 and 47 percent as of December 2019.

Rural and urban inflation diverged in FY18/19 as rural prices fell at a faster pace. Rural and urban headline inflation that had moved in a synchronized fashion in FY17/18 started diverging at the beginning of FY18/19, especially Q2 FY 18/19 onwards. The divergence was caused by a sharp decline in rural inflation for most of 2018 (Figure A.27). This faster decline was mainly due to differences in the consumption baskets in rural and urban areas. Food has a weight of 47 percent in the rural consumption basket compared to about 30 percent in the urban consumption basket. Therefore, as food price inflation abated between July and December 2018, rural inflation fell faster relative to urban inflation. Then, with the subsequent increase in food inflation, the divergence between the two price indices reduced. Rising inflation in food commodities adversely affected the purchasing power of households in rural areas. (Figure A.27) shows that the period of low (below 4 percent) rural inflation between August 2018 and September 2019 resulted in depressed (averaging 1.6 percent yoy) but positive growth in real rural wages. With the pick-up in rural inflation since October 2019, the purchasing power of rural wage workers began contracting in real terms.

Figure A. 27: Rural and Urban inflation converged with rising food inflation



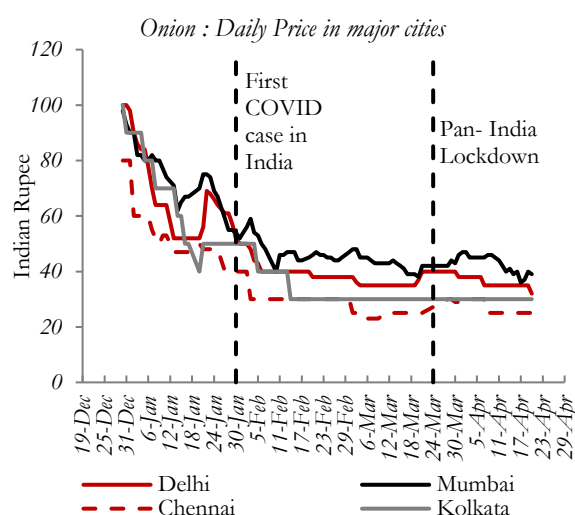
With the COVID-19 lockdown, the prices of most major commodities increased, reflecting disruptions in supply chains. Besides onions, the price of almost all the other major commodities increased sharply (Figure A.28). Even though prices were stable or decreased marginally before the enforcement of the country-wide lockdown, supply chain disruptions following it resulted in double digit price increases for many daily essentials. While farmers were ready to supply to the wholesale market,

¹⁷ Due to lockdown induced data collection issues, food CPI for April 2020 is not strictly comparable with the series for earlier months, because it excludes two food sub-groups – ‘Meat and fish’ and ‘Prepared meals, snacks, sweets etc.’.

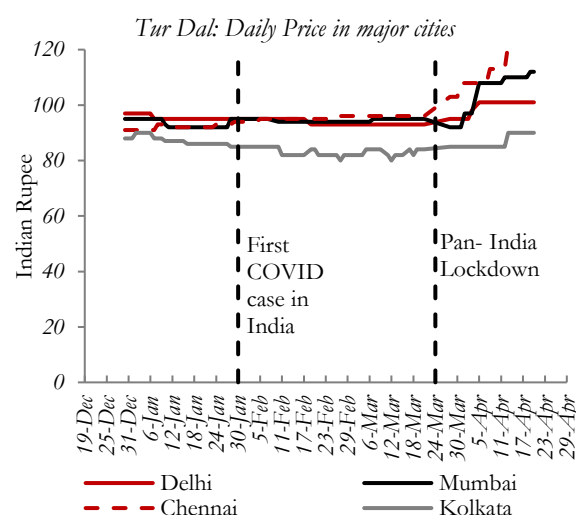
intermediaries including wholesalers and middlemen found it difficult to trade due to restrictions in the lockdown period. The highest rise was observed in the prices of pulses and oil, and other cooking essentials such as atta (wheat flour), potatoes, and vanaspati (cooking medium). Table A.2 summarises the major commodities used in cooking and the percentage increase in price between 25 March (when the lockdown was announced) and 28 April. Except onions, the prices of essentials increased across all major metros in India (Figure A.29).

Figure A.28: Daily price changes of selected essential food grains due to COVID-19 lockdown in Mumbai, Delhi, Kolkata and Chennai

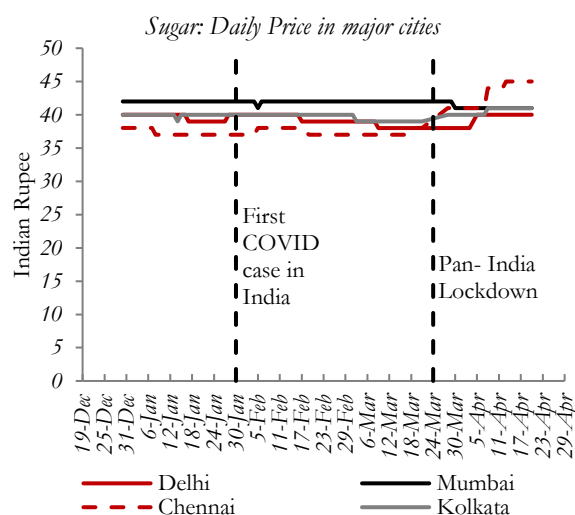
Once exports were banned and fresh supplies reached the market, onion prices continued to decline from the beginning of December and stabilized thereafter



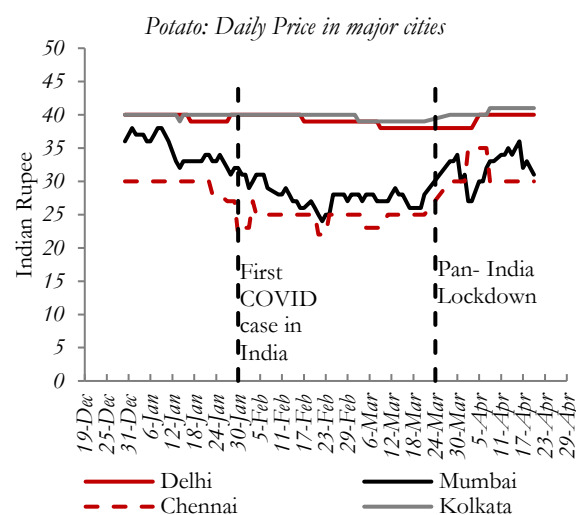
Tur dal witnessed one of the steepest rises in prices among major food commodities once the lockdown was imposed on 25 March



Sugar price witnessed a rise after the announcement of the nationwide lockdown, with the highest increase in percentage terms in Chennai



After declining in two major cities, viz. Mumbai and Chennai, potato prices started rising a few days before the lockdown



Source: Department of Consumer Affairs, Ministry of Consumer Affairs, Food and Public Distribution, India

Table A.2: Percentage change in price of major commodities between 25 March and 28 April

Commodity	% Change in price
Gram Dal	23.0
Masoor Dal	21.0
Tur Dal	17.4
Moong Dal	16.2
Potato	11.7
Sunflower Oil	9.2
Palm Oil	8.6
Atta	8.5
Soya Oil	8.4
Urad Dal	8.4
Vanaspati	8.1
Mustard Oil	6.1
Wheat	6.1
Rice	3.5
Tomato*	-12.3
Onion	-21.9

Source: Department of Consumer Affairs, Ministry of Consumer Affairs, Food and Public Distribution, India

Note*: Price of tomatoes declined by almost 66 percent in Chennai in the given period, which pulled down the average inflation. In other cities, the prices either remained stable or increased in the reference period.

After the initial increase in prices resulting from supply disruptions, the lockdown depressed incomes and aggregate demand and led to a sharp increase in unemployment. Consequently, inflation is expected to fall. This sentiment was reflected in the March 2020 edition of the RBI's quarterly Inflation Expectations Survey of Households. The survey noted that households expect inflation to decline by 10 bps in the next quarter and by 20 bps in the next year. Food price inflation is likely to moderate further, given satisfactory food grains and horticulture production in the ongoing and past agricultural¹⁸ seasons¹⁹ and sufficient food-grain stocks²⁰.

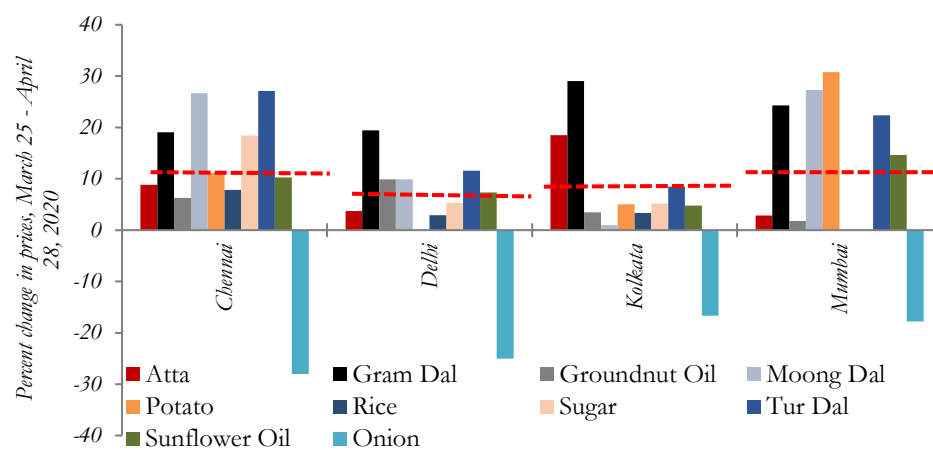
Authorities have released only partial data due to data collection difficulties during the lockdown. Authorities have not released the headline CPI data for April 2020, and instead, price indices for only three of the six groups of items – a truncated food price index, housing, and health. In computing the food index, sub-groups that have particularly been adversely affected (“meat and fish,” and “prepared meals, snacks, etc.”) have been omitted. The National Statistical Organization has suspended its field operations since 19th March to limit the risk of contagion. Hence, for April estimates, data was collected telephonically and from retail outlets. This has had two effects: it has 1) limited the coverage of price surveys to essential commodities, and select retail outlets, and 2) incorrectly picked up differences in trade and transport margins as price changes, since the newly surveyed retailers may have very different supply chains from the regularly surveyed retailers.

¹⁸ The Indian agricultural crop year is from July to June. It has two main cropping seasons – Kharif from July to October (during the monsoon season) and Rabi from October to March (during winters). Grains are procured and stored by central and state agencies for subsequent distribution throughout the year through the public distribution system.

¹⁹ <http://agricoop.gov.in/sites/default/files/Time-Series-1st-Adv-Estimate-2019-20-Final-Press.pdf>

²⁰ <http://fci.gov.in/stocks.php?view=46>

Figure A.29: Supply-chain bottlenecks caused prices to spike immediately following the lockdown



Source: Department of Consumer Affairs, Ministry of Consumer Affairs, Food and Public Distribution, India, and World Bank staff calculations

4. External Sector

India's external performance in FY19/20 was characterized by a narrowing CAD, robust foreign direct investment (FDI) inflows, rebounding portfolio flows, and strong remittance inflows. These factors contributed to an increase in foreign exchange reserves in FY19/20. The contraction of the CAD was driven by a narrowing of the merchandise trade deficit, caused by sharper contraction in imports relative to exports, due to slowing domestic demand and falling oil prices. Overall, export growth was subdued due to a moderation in global economic activity and heightened trade tensions. Net FDI inflows were robust during FY19/20. The COVID-19 outbreak has clearly affected trade and capital flows. Merchandise trade growth decelerated sharply in March and April 2020 with both exports and imports contracting. Net Portfolio flows also saw a sharp reversal in March and the Rupee depreciated – albeit less than the currencies of emerging market peers.

The CAD narrowed to 0.9 percent of GDP in FY19/20 (Figure A.30) from 2.1 percent in FY18/19, thanks to a reduction in the trade deficit, and import growth moderating faster than export growth. In Q4 FY19/20, the current account registered a surplus of 0.1 percent of GDP; the first surplus since March 2007. Slowing domestic demand and falling oil prices drove a decline in goods imports, which fell by 8.2 percent in FY19/20, relative to the previous fiscal year (Figure A.32). During FY19/20, weakening global trade led to fall in merchandise exports by 4.8 percent (Figure A.31). The net effect was a narrowing of the merchandise trade deficit²¹ which stood at USD 157.5 billion in FY19/20 compared to USD 180.3 billion in FY18/19.

Figure A.30: Both global and domestic factors contributed to a narrowing CAD....

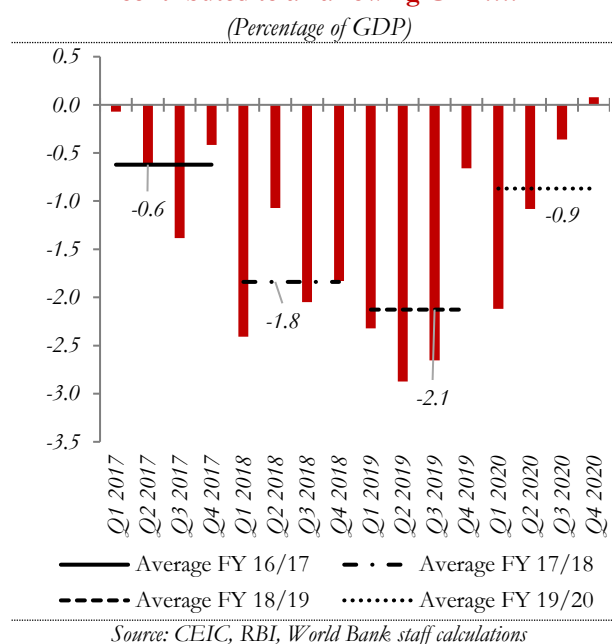


Figure A.31: Goods exports declined further in all categories....

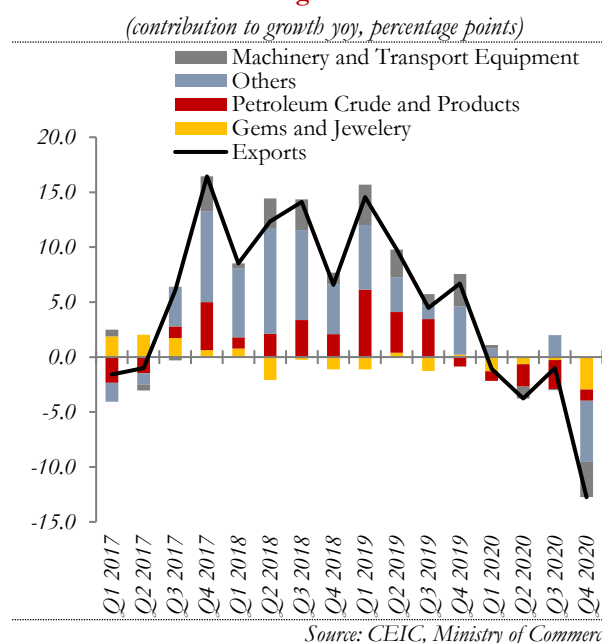
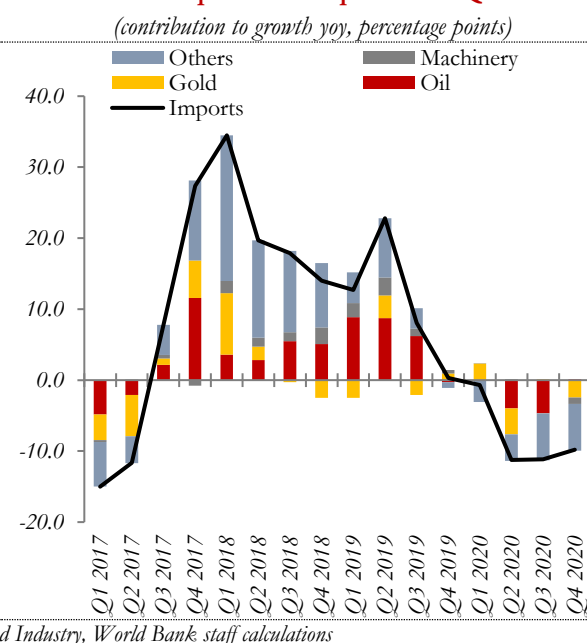


Figure A.32:and goods imports declined at a faster pace than exports until Q3



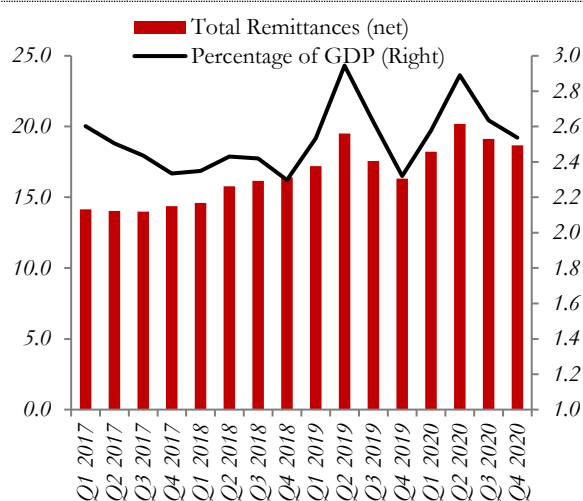
²¹ Trade in services registered a net surplus of USD 84.9 billion in FY19/20, an improvement of USD 3 billion relative to FY18/19.

Total remittances (net)²² increased to USD 76.2 billion in FY19/20, up 8.0 percent from the previous fiscal year. Net remittances declined in Q4 FY19/20 by about USD 0.5 billion relative to the previous quarter, but there was an increase of about USD 2.4 billion relative to the same quarter of previous fiscal year (Figure A.33). Remittances inflows to India are projected to fall by about 23 percent in 2020, to USD 64 billion—a striking contrast to growth of 5.5 percent and receipts of USD 83 billion in 2019²³. Remittances are expected to remain subdued in 2021 due to the global economic slowdown and travel restrictions affecting migratory movements.

In FY19/20, the services trade surplus stood at 3.0 percent of GDP (the same as the previous fiscal year). Software services constitute the bulk (around 40–45 percent) of services exports, followed by business services (about 18–20 percent), travel (11–14 percent), and transportation (9–11 percent). India's net services surplus (as a percent of GDP) had been steadily declining since FY 13/14, before stabilizing over the past few years²⁴. Increasing service imports, which can be partly attributed to increasing FDI inflows in the service sector, have been the main driver of the decline in net services surplus since FY13/14 (Figure A.34). Service exports and imports registered year-on-year growth of 2.5 percent and 1.8 percent, respectively in FY19/20²⁵. Due to the COVID-19 crisis, April-May (combined)²⁶ service exports and imports collapsed by 9.6 percent and 19.5 percent (on a year-on-year basis) respectively (Figure A.35).

Figure A.33: ...while remittances remained strong despite the trade slowdown

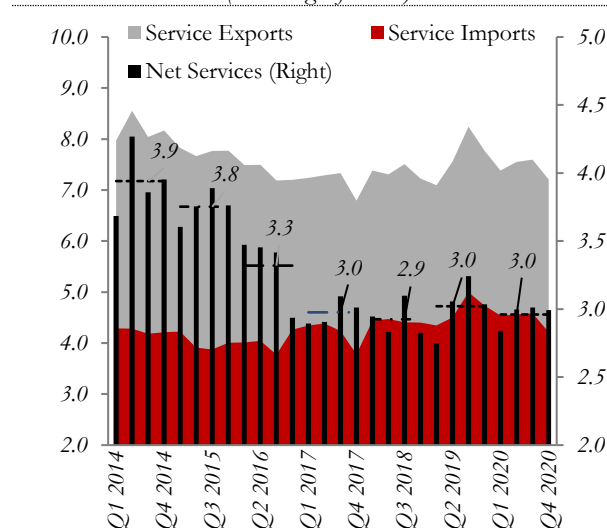
(USD billions (LHS); Percent (RHS))



Source: CEIC, RBI, World Bank staff calculations

Figure A.34: The net services surplus has stabilized in recent years

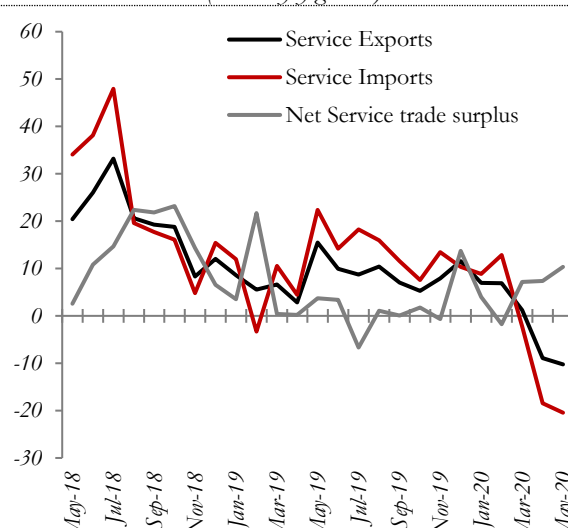
(Percentage of GDP)



Source: CEIC, RBI, World Bank staff calculations

Figure A.35: Services exports and imports growth continue to decline

(Percent yoy growth)



Source: CEIC, RBI, World Bank staff calculations

²² Total remittances (net) are defined as the sum of net transfers (personal plus other current transfers), net compensation of employees, net migrants' transfers (i.e., capital transfers between resident and non-resident households).

²³ COVID-19 Crisis Through a Migration Lens, Migration and Development Brief 32 (April 2020), World Bank Group.

²⁴ India's net service trade surplus has been around 3 percent of GDP since FY16/17.

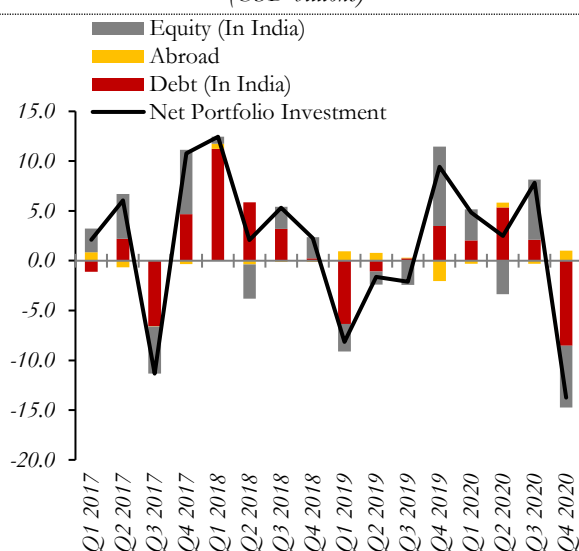
²⁵ Data based on Balance of Payments Statement released by RBI on 30th June 2020.

²⁶ Monthly data on services are provisional and typically are revised when the Balance of Payments data are released on a quarterly basis.

Portfolio investment recorded net inflows of USD 1.4 billion in FY19/20, in contrast to outflows of USD 2.4 billion in FY18/19. The net foreign portfolio investment (FPI) inflows (of about USD 15.1 billion) during the first three quarters of FY19/20 were driven by a host of global and domestic factors, including a change in the US monetary policy stance, expectation of positive outcomes of the US–China trade deal and domestic corporate tax rate cuts. There was a brief pause in inflows in the second quarter of FY19/20 (Figure A.36) due to the imposition of an enhanced tax surcharge on FPIs in the Union Budget presented in July. However, investor sentiment recovered in the third quarter after the enhanced tax surcharge on FPIs was rolled back²⁷ and the government announced corporate tax rate cuts targeted at boosting corporate profitability and encouraged the creation of new manufacturing facilities. Due to the ongoing COVID-19 crisis, net portfolio flows witnessed significant outflows of about USD 13.7 billion in Q4 FY19/20²⁸, and most of this occurred in March 2020 (Figure A.37).

Figure A.36: Portfolio flows remained robust in the first three quarters of FY19/20....

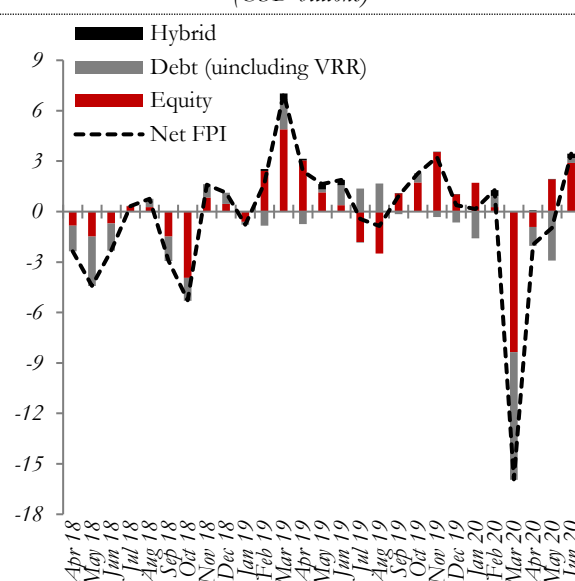
(USD billions)



Source: CEIC, RBI, World Bank staff calculations

Figure A.37: but took a hit in Q4 due to the COVID-19 outbreak

(USD billions)



Source: CEIC, National Securities Depository Limited, World Bank staff calculations

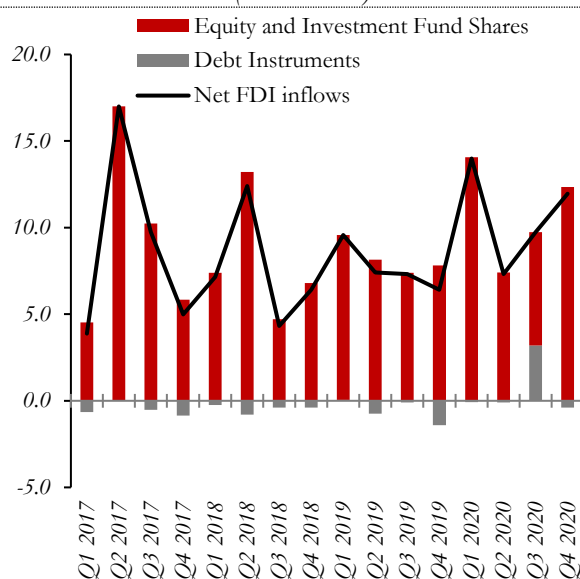
At USD 43.0 billion, net FDI inflows were higher in FY19/20 than in the previous year (USD 30.7 billion) (Figure A.38). FDI equity inflows grew 12.6 percent in FY19/20 (Figure A.39) with the sectoral shares remaining similar to historical averages (Figure A.40). The sectors which attracted the most FDI equity inflows during FY19/20 were services (USD 7.9 billion) and computer software and hardware (USD 7.7 billion). Singapore continued to be the largest source of FDI in India during FY19/20 with investments worth USD 11.65 billion, followed by Mauritius (USD 8.24 billion), and the Netherlands (USD 6.5 billion).

²⁷ Net equity flows were on the sell-side in July–August. However, the direction of flow reversed in September with the withdrawal of the enhanced surcharge in the last week of August.

²⁸ This data is based on Balance of Payments Statistics published by RBI. According to the Depository data (published by NSDL), net FPI flows during Jan–March 2020 were about USD 14.5 billion.

Figure A.38: Net FDI inflows remained robust with strong equity inflows

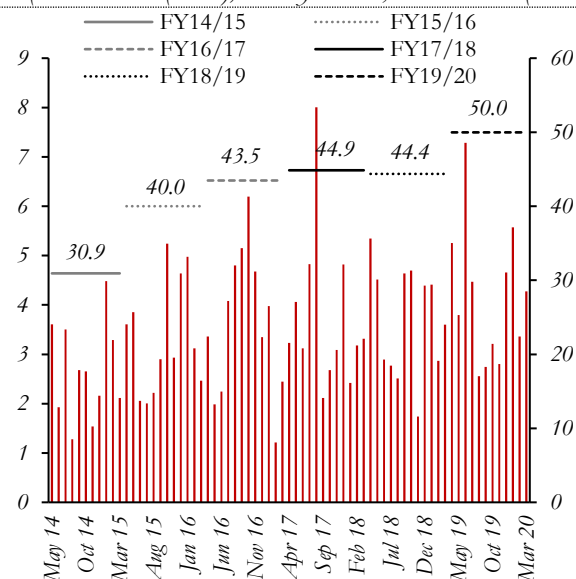
(USD billions)



Source: CEIC, RBI, World Bank staff calculations

Figure A.39: FDI equity inflows registered strong growth in FY19/20

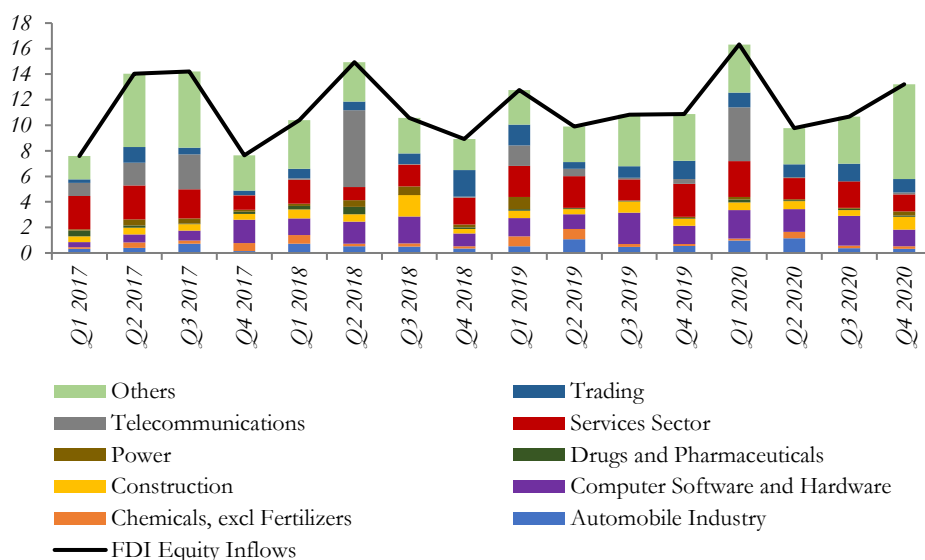
(USD billions (LHS); Fiscal year total, USD billions (RHS))



Source: Department for Promotion of Industry and Internal Trade, World Bank staff calculations

Figure A.40: FDI Equity inflows remained stable across various sectors

(USD billions)



Source: CEIC, Department for Promotion of Industry and Internal Trade, World Bank staff calculations

During FY19/20, foreign exchange reserves (on a balance of payments basis) recorded an accretion of USD 59.5 billion compared to a depletion of USD 3.3 billion in the previous fiscal year. This increase was driven by a lower CAD, robust capital inflows, and higher external commercial borrowings (ECBs) (Figure A.41). In nominal terms (including valuation effects), foreign exchange reserves increased by USD 64.9 billion during FY19/20 against a depletion of USD 11.7 billion during FY18/19. The valuation gain, reflecting increase in gold prices, amounted to USD 5.4 billion during FY19/20. Foreign exchange reserves stood at USD 477.8 billion by the end of FY19/20.

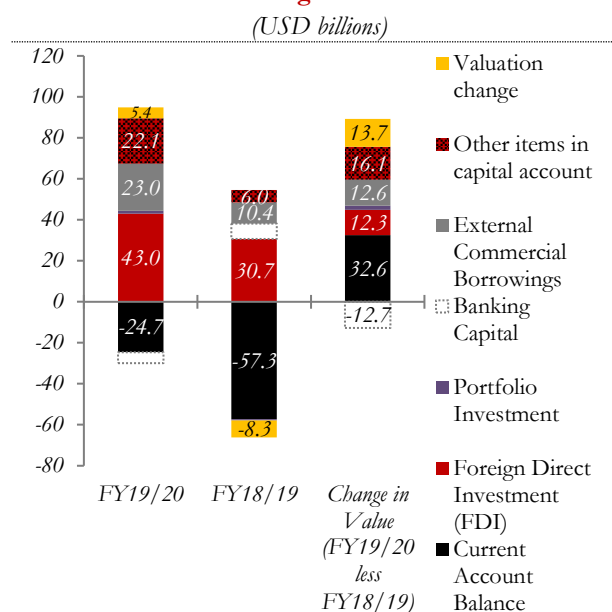
The impact of COVID-19 on India's external sector

Due to the ongoing COVID-19 crisis, both merchandise exports and imports collapsed sharply, and contracted about 60 percent year-on-year in April 2020. The contraction was broad-based, with oil imports growth falling 59 percent yoy, gold imports contracting 100 percent, electronics goods by 63 percent, and coal imports by 49 percent. As for exports, the categories that suffered the most were petroleum products, which contracted 66 percent yoy, jewellery exports which were nearly zero (in level terms), textiles & allied products down 88 percent, electronics down 71 percent, and engineering goods down 65 percent. Provisional estimates suggest a net trade surplus (merchandise and services together) of USD 4.4 billion in April-May 2020 as overall imports declined more than exports. Exports (merchandise and services) in April-May 2020 are estimated to be USD 61.6 billion – contraction of 33.7 percent compared to the same period last year and total imports are estimated to be USD 57.2 billion, reflecting a contraction of 48.3 percent²⁹.

The COVID-19 sell-off episode resulted in significant net portfolio outflows of about USD 15.9 billion in March 2020, thereby offsetting the net inflows (received until December 2019) for the entire fiscal year FY19/20. The outflows were led by both equity and debt portfolio flows in roughly equal proportions, with the financial services sector being affected the most (accounting for approximately 40 percent of the equity outflows and sovereign debt outflows and about 86.5 percent of the total debt outflows in March 2020). However, India's net capital outflows (of about USD 3.2 billion, in March 2020) were modest when compared to other emerging market peers³⁰ (See Figure A.44).

The sell-off episode continued in April–May with net portfolio outflows of about USD 2.9 billion. This was led by net debt outflows of about USD 4.0 billion and offset partially by net equity inflows of USD 1.1 billion³¹. However, in June 2020, foreign portfolio investment registered net inflows of about USD 3.4 billion with net equity inflows of USD 2.9 billion. Net portfolio outflows are during the current crisis have exceeded sell-off episodes seen since the since the GFC (Figure A.42). Within 40 days of the onset of the COVID-19 crisis³², equity outflows were at least twice the magnitude of outflows during the GFC. Although debt outflows were of similar magnitude to those recorded during the Taper Tantrum, the

Figure A.41: Sources of variation in foreign exchange reserves



Source: RBI, World Bank staff calculations

²⁹ These estimates are published by Ministry of Commerce and Industry.

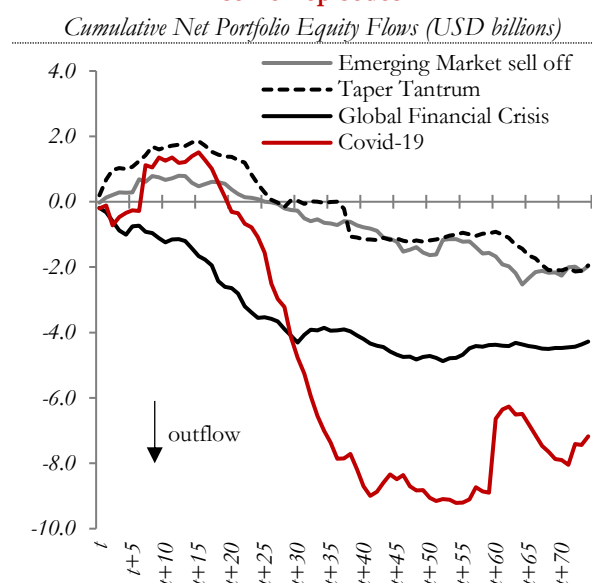
³⁰ Based on data published by International Institute of Finance (IIF).

³¹ Net equity flows include net hybrid flows of USD 0.1 billion.

³² We consider 30th January, 2020 as the starting date for COVID-19 crisis in India, when the first coronavirus case in India was reported.

situation appears to be worsening further as debt flows in the third month since the onset of the crisis remained on the sell side (Figure A.43).

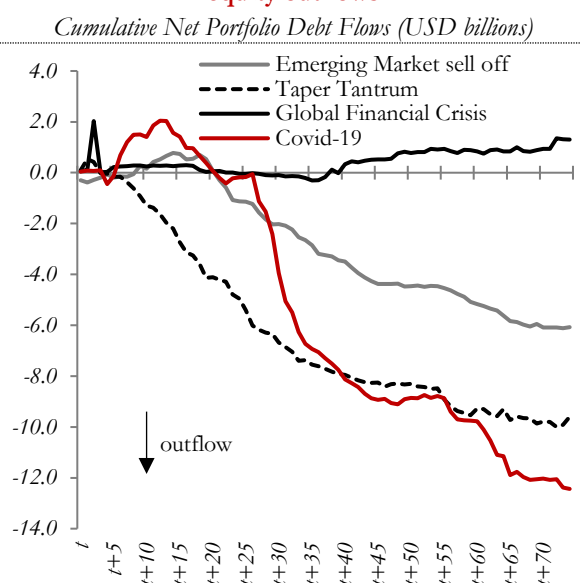
Figure A.42: COVID-19 crisis worse than other sell-off episodes



Source: CEIC, World Bank staff calculations

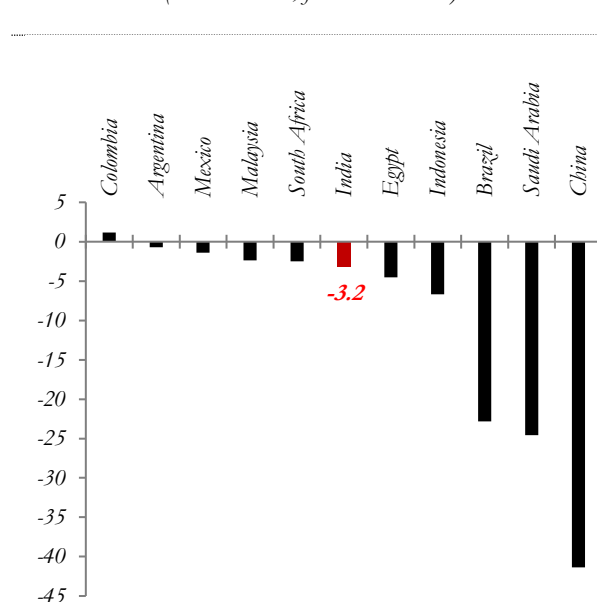
Note: "t" denotes the starting date of crisis, "t+1" denotes the next day and so on. Starting date for COVID-19 is 30th January, 2020 (coincides with first COVID-19 case reported in India); for Emerging Market sell-off, 16th March, 2018; for Taper Tantrum, 22nd May, 2013 (FED Chair hinted at potential unwinding of QE); and for Global financial crisis, 15th September, 2008 (Lehman Brother filed bankruptcy on this date).

Figure A.43: Debt outflows were higher than equity outflows



Source: CEIC, World Bank staff calculations

Figure A.44: Many emerging markets witnessed significant net capital outflows
(USD billions, for March 2020)

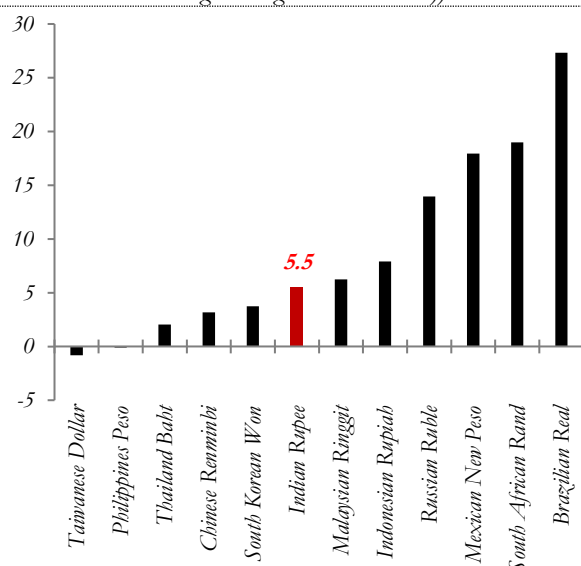


Source: IIF, World Bank staff calculations

Note: Figures presented are provisional estimates and may include errors and omissions; "-" denotes outflows.

Figure A.45: Emerging market currency depreciation since COVID-19 sell off

(From January 30 until May 29, 2020; percent change in exchange rate against US Dollar)



Source: CEIC, World Bank staff calculations

Note: A positive percentage change denotes depreciation of currency against US dollar.

Since the onset of the COVID-19 crisis, the Rupee depreciated by around 5.5 percent relative to the US dollar due to sell-off pressures. However, it depreciated less relative to currencies of other emerging market economies (see Figure A.45). This is partly due to India's strong external fundamentals,

including modest external debt, at about 20.1 percent of GDP³³. India also has relatively robust positions with regard to net international liabilities and gross external financing needs relative to foreign exchange reserves. At the end of June, 2020³⁴, RBI's foreign exchange reserves were comfortably placed at USD 506.8 billion. The accretion of reserves can be partly attributed to narrowing trade deficit and falling oil prices.

³³ As at end-December 2019.

³⁴ As on June 26, 2020.

5. Macrofinancial developments

India's financial markets made a strong start to FY19/20, before concerns about trade wars and the COVID-19 outbreak saw the year end in significant losses. India's macrofinancial assets, including the Rupee and bond yields, demonstrated relative robustness, until the onset of the COVID-19 crisis. Monetary policy was accommodative during FY19/20 as the RBI focused its policy efforts on supporting growth and on strengthening regulatory oversight to address challenges arising from NPLs. After the onset of the COVID-19 crisis in late Q4 of FY19/20, the RBI responded proactively through policy rate cuts and a series of measures aimed at easing regulatory forbearance and ensuring access to liquidity.

India's financial markets made a strong start in FY19/20 before concerns about trade wars and the COVID-19 outbreak saw the year end in significant losses. In the first half of FY19/20, major indices (the SENSEX and the Nifty 50) declined marginally. The Government's attempt to provide some support to the economy in Q3 FY19/20 helped generate a reversal in momentum, with both the Nifty 50 and the SENSEX reaching record levels in mid-January 2020, just before the first positive case of COVID-19 was recorded in India. Thereafter, however, the Indian financial markets suffered significant losses in FY19/20 compared to FY18/19 when markets recorded double digit gains (Figure A.58).

The Rupee depreciated 8.6 percent against the USD in FY19/20, compared to around 6 percent in the previous fiscal year (Figure A.47). For

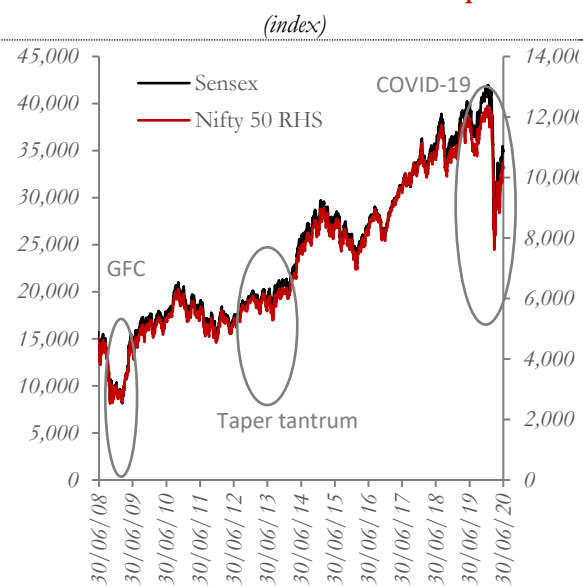
most of the fiscal year, the Rupee was relatively stable, although it suffered temporary bouts of volatility caused by policy decisions that included the imposition (in July 2019) of a surcharge on income tax on high-income trusts (which affected several major foreign investment funds and was subsequently withdrawn). These policy changes resulted in strong capital outflows (see discussion in Section 4), which added downward pressure on the exchange rate. The announcement of a corporate income tax cut in September 2019 contributed to net portfolio inflows, which placed upward pressure on the Rupee, but this was offset by concerns about weak domestic growth. These offsetting factors played a large role in keeping the Rupee relatively stable until Q4.

The 10-year benchmark yield fell 121 bps to 6.29 percent in FY19/20 (compared to its relative stability in FY18/19) (Figure A.48). A major reason for the fall in yields was RBI's easing monetary policy stance in FY19/20 combined with efforts to improve transmission between lending rates and yields. On that front, in Q3, the RBI engaged in interventions similar to the U.S. Federal Reserve's "Operation Twist." The objective was to address the steepening in India's yield curve and reducing the term premium that had widened.

a. Impact of COVID-19 on macro-financial indicators

After the onset of the COVID-19 crisis, Indian financial markets reacted negatively and rapidly entered bear market territory. The SENSEX and the Nifty 50 recorded losses of around 28 percent between the end of January and the time the government imposed mobility restrictions at the end of March. Just before the first official case was recorded in India at the end of January, markets had gained around

Figure A.46: Financial markets plunged sharply from record levels due to the COVID-19 pandemic

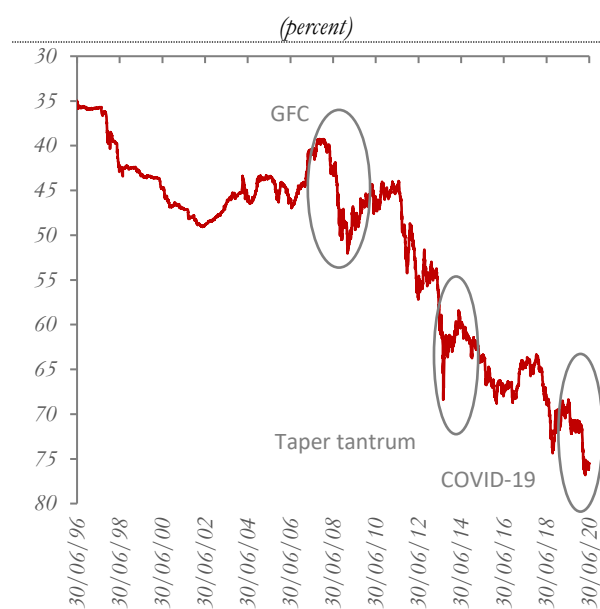


Source: CEIC, World Bank staff calculations

5 percent, after being steady in the first half of FY19/20. Markets have since pared back most of the losses, but these movements seem at odds with increasing evidence about the impact of the lockdown on real activity (see Section 1).

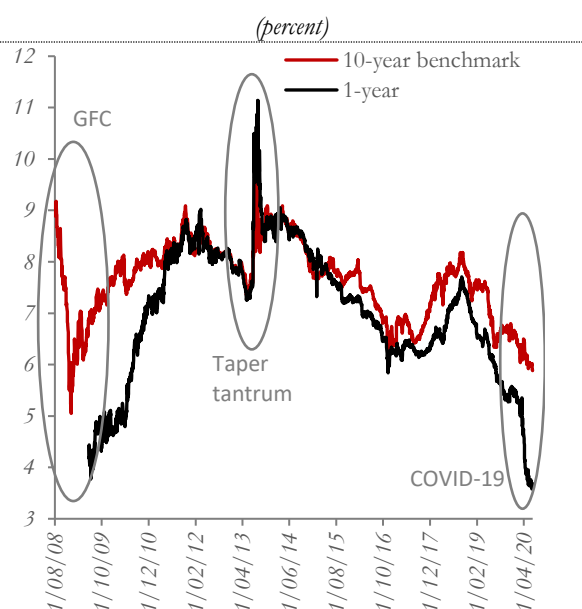
Until the first officially recorded COVID-19 positive case in India, the Rupee had depreciated only around 3 percent against the USD. Thereafter, it lost a further 6 percentage points. The performance of the Rupee during the spike in financial market volatility over the past few months is roughly on par with that seen during the GFC and the Taper Tantrum. Depreciation pressure on the exchange rate rose significantly in March due to massive net portfolio outflows (see Section 4 – including the single largest daily outflow in the past 20 years on March 17³⁵ amidst signs of the virus spreading rapidly in India and the imposition of travel restrictions. Bond yields fell after India recorded its first COVID-19 positive case at the end of January on the back of significant monetary policy easing. The 10-year benchmark yield fell (50 bps) between February and April, while the yields on 1-year bonds fell 156 bps over the same period.

Figure A.47: The exchange rate depreciated on the back of monetary policy easing and capital outflows



Source: CEIC, World Bank staff calculations (inverted scale)

Figure A.48: Yields fell on the back of monetary policy easing and targeted interventions by the RBI



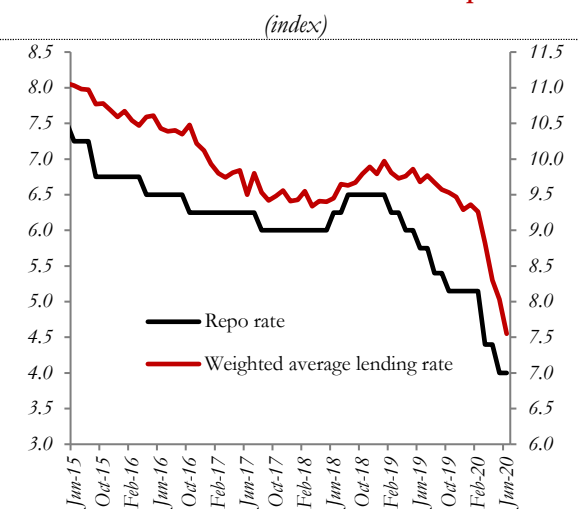
Source: CEIC, World Bank staff calculations

³⁵ On March 17, 2020, India witnessed a massive single-day net portfolio outflow of about USD 2.2 billion. This was one of the largest single-day outflows over the past two decades.

b. Pre-COVID-19 monetary policy was geared primarily to supporting growth

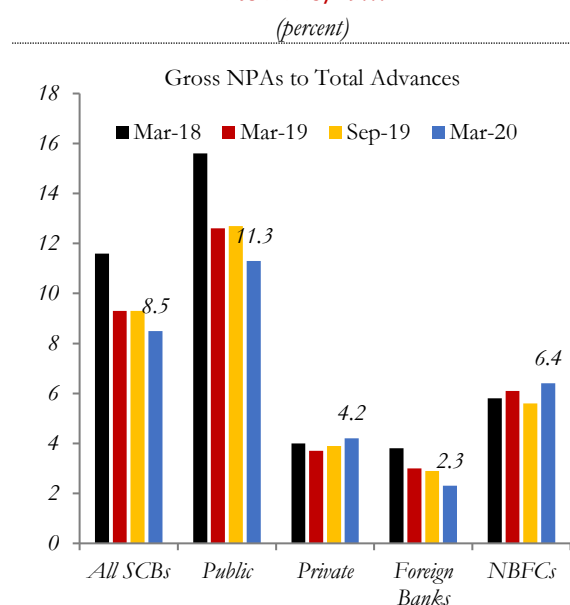
Prior to the onset of the COVID-19 pandemic, monetary policy was focused on supporting economic activity (in the context of moderating GDP growth) and strengthening the macroprudential framework. Also, inflationary pressures were well within the RBI's target range until the end of FY19/20, partly due to the significant moderation in economic growth. These factors allowed the RBI to move its monetary policy stance from neutral to accommodative to support growth (Figure A.49). With investment growth moderating, the provision of credit was also an essential element of the RBI's deliberations in FY19/20 – especially in the context of high NPLs and weak transmission to lending rates. In FY19/20, the repo rate was cut at four consecutive bi-monthly meetings by a total of 110 bps – from 6.25 percent to 5.15 percent. In its fifth bi-monthly meeting, the RBI's Monetary Policy Committee (MPC) paused cutting rates despite cutting its growth forecast for FY19/20 to 5 percent (from 6.1 percent in its October meeting). The RBI noted³⁶ that its stance was sufficiently accommodative at that stage. A spike in food prices in Q3 was offered as another reason for the cessation in repo rate cuts.

Figure A.49: Financial markets plunged sharply from record levels due to the COVID-19 pandemic



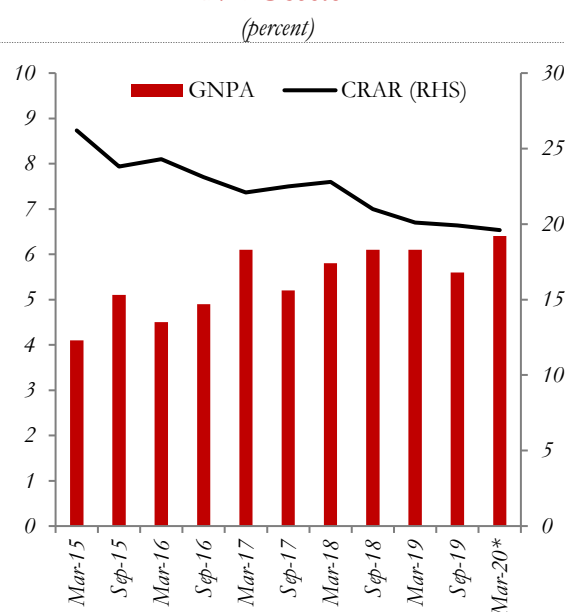
Source: CEIC, World Bank staff calculations

Figure A.50: Overall, GNPA's improved compared to FY18/19...



Source: Reserve Bank of India (FSR, July 2020)

Figure A.51: ...while challenges remain in the NBFC sector



Source: Reserve Bank of India (FSR, July 2020)

Note: * March 2020 values are provisional.

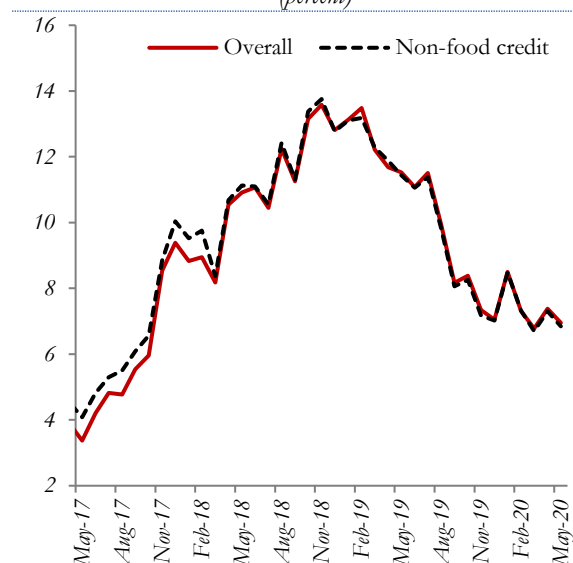
In addition to the shift toward an accommodative monetary stance, the RBI also undertook several measures to bolster financial and banking sector stability, after the collapse of a major NBFC—IL&FS—in late 2018. Despite improvements in the gross non-performing assets (GNPA) ratio for all scheduled commercial banks in FY19/20, the NBFC and the private sector saw a moderate deterioration, with their GNPA ratios rising from 6.1 percent to 6.4 percent and 3.7 percent to 4.2 percent

³⁶ https://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=3796

respectively³⁷(Figure A.62). In its December 2019 edition of the bi-annual Financial Stability Report (FSR), the RBI noted that the collapse of IL&FS had resulted in forced improvements in regulatory oversight due to risks posed to the financial system. As such, the RBI introduced a liquidity coverage ratio (LCR) requirement for NBFCs with assets more than INR 5,000 crore (accounting for around 87 percent of all NBFCs). The LCR requires NBFCs to maintain a minimum level of high-quality liquid assets to cover the expected net cash outflows during periods of stress³⁸. To some extent, the stress in the NBFC sector was reflected by another measure of resilience and soundness – the capital adequacy ratio (CRAR) – which also declined marginally from 20.1 percent in March 2019 to 19.6 percent in March 2020³⁹. Despite the slight decline, the ratio remains well above those recommended by Basel III requirements. For the banking sector, the CRAR rose from 14.3 percent to 14.8 percent over the same period⁴⁰.

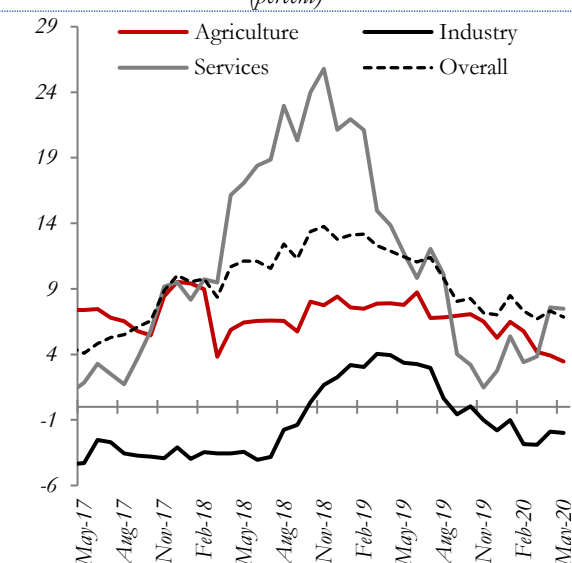
The moderating growth trajectory was accompanied by a fall in credit growth, which was made more acute by rising NPAs, especially in the NBFC sector. Despite monetary policy easing worth 110 bps in FY19/20, non-food credit growth continued to decelerate and fell to a 2-year low of 7 percent in December 2019 (Figure A.52). Non-food credit growth averaged just over 9 percent in FY19/20 compared to just over 12 percent in FY18/19 (when it was precisely driven by NBFCs and housing financing companies). The moderation in credit growth was particularly sharp in the services (which includes NBFCs) and industry sectors due to the overall slowdown in economic growth (Figure A.53). The overall economic growth moderation, rising NPLs, and general lending risk aversion accelerated the decline in credit growth despite some offset from monetary policy easing.

Figure A.52: Credit growth was tepid throughout FY19/20...
(percent)



Source: Reserve Bank of India (FSR, July 2020), World Bank staff calculations

Figure A.53: ...and no sector was immune to the moderation
(percent)



Source: Reserve Bank of India (FSR, July 2020), World Bank staff calculations

³⁷ The NBFC sector saw an improvement in the GNPA ratio from 6.1 percent in March 2019 to 5.6 percent in September 2019; however, it deteriorated to 6.4 percent in March 2020.

³⁸ https://www.rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=48982

³⁹ March 2020 data is provisional.

⁴⁰ However, the CRAR of SCBs edged down to 14.8 percent from 15.0 percent in September 2019, mainly due to the reduction of CRARs of the PSBs.

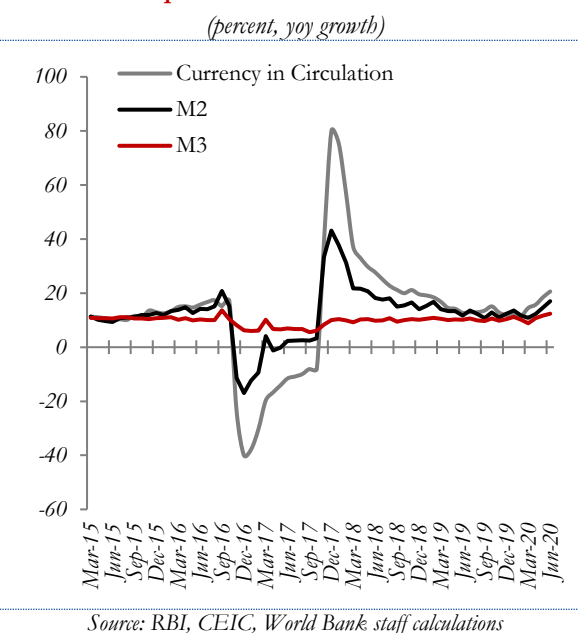
Besides supporting growth and bolstering credit growth, RBI's focus in FY19/20 was also to ensure adequate liquidity in the economy. Money supply aggregates (Figure A.54) showed a return to pre-demonetization growth rates and various RBI updates from FY19/20 provide further supporting evidence to suggest that there is ample liquidity in the economy.

c. Monetary policy responses to the COVID-19 crisis

After the RBI paused its easing stance in late 2019, the next major rate decision was made at an out-of-cycle meeting at the end of March 2020, in direct response to the sharp slump in activity⁴¹. The MPC lowered the repo rate at the end of March 2020 by 75 bps, and the reverse repo rate by 90 bps (thus creating an asymmetrical corridor as repo was reduced by a smaller 75 bps). The goal was to make it relatively unattractive for banks to passively deposit funds with the Reserve Bank and instead, to use these funds for on-lending to the economy. In another meeting in mid-April, the RBI's governor announced a further reduction of 25 bps in the reverse repo while keeping the repo rate unchanged, to encourage banks to lend the surplus funds to the economy. In the May MPC meeting, another cut of 40 bps was announced for the repo, reverse-repo, bank rate, and MSF rate. Thus, the repo rate was cut twice, by a cumulative 115 bps, and the reverse repo rate was cut at three consecutive MPC meetings by a total of 155 bps – from 4.90 percent to 3.35 percent.

The RBI has also responded to changing macrofinancial risks through a series of regulatory responses aimed at maintaining liquidity in the financial system, while simultaneously offering support to borrowers. In addition to wholesale support, the RBI has also responded to sector-specific liquidity needs and continues to adjust its policies based on market behaviour. Soon after the repo rate cut, over the course of March, April, and May 2020, the RBI introduced several measures primarily aimed at improving liquidity in the financial system (Table A.3) and instituting regulatory forbearance for banks and other financial institutions. These measures included: (i) maintaining adequate liquidity in the system in the face of COVID-19 related dislocations; (ii) facilitating and incentivizing bank credit flows; (iii) easing financial stress; and (iv) enabling the normal functioning of markets. Many of the measures undertaken by the RBI were similar to those adopted during the GFC. An assessment of the efficacy of the various measures will begin to be possible once data such as credit growth, NPLs, and other banking sector indicators are released over the next few months.

Figure A.54: Money supply growth has returned to pre-demonization rates



⁴¹ See Part B for a detailed discussion about the RBI's response to the COVID-19 outbreak.

Table A.3: Measures to improve liquidity

Policy response	Objective	Description	Other
Reduction in policy rate	To improve liquidity and lower borrowing costs	<p>The repo rate under the liquidity adjustment facility (LAF) was reduced by 75 basis points (bps) to 4.40 per-cent from 5.15 per-cent on March 27, 2020; and again, to 4 percent on May 22, 2020.</p> <p>The reverse repo rate under the LAF (the rate banks earn for temporary liquidity parked at RBI) was reduced to 3.75 percent on April 17, 2020, and by another 40 bps to 3.35 percent on May 22, 2020.</p>	During the GFC, the policy rate was reduced by 425 bps between October 2008 and April 2009, while the reverse repo rate was reduced by 275 bps during that period.
Reduction in Cash Reserve Ratio (CRR) and increased overnight borrowing limit	To improve liquidity	<p>The CRR for all banks was reduced by 100 bps to 3 percent of net demand and time liabilities with effect from March 28, 2020.</p> <p>The borrowing limit for the marginal standing facility (MSF) was increased from 2 to 3 percent of the SLR.</p>	<p>This reduction in the CRR released primary liquidity of about Rs. 1.37 trillion (US\$18 billion) across the banking system.</p> <p>The response to the GFC also included the reduction of CRR by 400 bps between October 2008 and April 2009.</p>
Targeted Long-Term Repo Operations (TLTROs) and Special Liquidity window	Ensuring sector-specific liquidity	<p>To alleviate cash flow pressures, the RBI conducted TRLTOs for a total amount of up to Rs. 1 trillion (US\$13.1 billion). Liquidity availed under the scheme by banks to be deployed in investment-grade corporate bonds, commercial paper, and non-convertible debentures over and above the outstanding level of their investments in these bonds. The RBI also announced TLTRO 2.0 worth Rs. 500 billion. The funds availed by banks under TLTRO 2.0 are to be invested in investment grade bonds, commercial paper, and non-convertible debentures of NBFCs, with at least 50 per cent of the total amount availed going to small and mid-sized NBFCs and MFIs. Under this facility, one auction was conducted and liquidity worth Rs. 128.5 billion was injected.</p> <p>Moreover, a Special Liquidity Facility for mutual funds (SLF-MF) of Rs. 500 billion was opened on April 27, 2020 to ease liquidity pressures on MFs.</p> <p>The RBI also undertook 6-month US dollar sell/buy swaps for USD 4 billion to provide USD liquidity to the foreign exchange market.</p>	Providing sector-specific liquidity was also part of the policy response during the GFC.
Refinancing Facilities for All India Financial Institutions.	Improved credit to MSMEs, microfinance borrowers, and the housing sector through banks, NBFCs and MFIs	<p>On April 17, 2020, the RBI announced the provision of special refinance facilities for a total amount of Rs.500 billion (US\$6.54 billion) to NABARD, Small Industries Development Bank of India (SIDBI), and NHB to enable them to meet sectoral credit needs.</p> <p>On May 22, 2020, the RBI extended a line of credit of Rs.15,000 crore to the EXIM Bank to enable it to avail a US dollar swap facility to meet its foreign exchange requirements.</p>	
Increased borrowing limits for federal and state governments.	Improved fiscal flexibility for central and state governments	RBI increased the Ways and Means Advances (WMA) limit. The limit for borrowing by state governments from the central bank was increased by 60 percent over and above the level on March 31, 2020. The limit for the central government for advances from the RBI was also raised from Rs. 1.2 to 2 trillion (from US\$15.7 to US\$26.2 billion).	

Source: Various statements by the RBI

Table A.4: Measures to ease regulatory forbearance

Policy response	Objective	Description	Other
Moratorium on Term Loans, interest deferment on working capital facilities, NPA recognition standstill, and extension of Resolution Timeline	Supporting borrowers through deferment of repayments, easing of working capital financing and NPL resolution timelines	<p>Lenders were allowed to grant a moratorium of six months on payment of instalments for all outstanding term loans as on March 1, 2020. In the case of the working capital facilities, the deferred interest could also be converted into a funded interest term loan repayable by March 31, 2021.</p> <p>The RBI also announced a six-month NPA recognition standstill for banks for all accounts for which a moratorium is granted, and which were not NPAs on March 1, 2020.</p>	<p>The period for implementation of resolution plans by lenders for their delinquent borrowers was extended by 180 days.</p> <p>Analysis by CRISIL, a rating agency, concluded that the loan moratorium could be the equivalent of additional liquidity of Rs.2.1 trillion (US\$27.85 billion) to the enterprise sector, if all eligible firms opted for it.</p> <p>The RBI, using a one-time measure, allowed banks to increase their exposure to a group of connected counterparties from the current 25 percent to 30 percent of the eligible capital base of the bank..</p> <p>The RBI increased the maximum permissible period of pre-shipment and post-shipment export credit sanctioned by banks from one year to 15 months, for disbursements made up to July 31, 2020.</p>
Distribution of dividends	Maintaining capital levels of banks	Scheduled commercial banks and cooperative banks shall not be permitted make any dividend pay-outs pertaining to the financial year ended March 31, 2020 until the quarter ending September 2020.	
NBFC loans to commercial real estate projects.	Supporting borrowers through forbearance in project timelines	NBFCs will be allowed to defer commercial real estate projects by an additional year, similar to the guidelines for banks.	
Deferment of Implementation of Net Stable Funding Ratio (NSFR) and decrease in LCR	Temporarily easing liquidity management thresholds for banks	Banks in India were required to maintain a NSFR of 100 percent from April 1, 2020. This has now been deferred by six months, until October 1, 2020. The LCR requirement for banks was brought down from 100 to 80 percent.	
Deferment of the last tranche of Capital Conservation Buffer (CCB).	Deferring capital requirements for banks	RBI deferred the implementation of the last tranche of CCB of 0.625 percent from March 31, 2020 to September 30, 2020.	
Extension of deadline for filing of compliance returns.	Relief from compliance deadlines	Both SEBI and RBI have extended the deadline for various returns by 1-3 months.	

Source: Various statements and press releases by the RBI.

Box A.2: The impact of COVID-19 on the financial and banking sectors

The COVID-19 crisis could exacerbate existing vulnerabilities in the financial and banking sectors. The immediate impact of regulatory responses aimed at supporting the financial and banking sectors has been somewhat mixed – mainly due to pre-existing challenges related to financial sector stress. The series of liquidity measures have addressed immediate liquidity concerns at the systemic level, but channelling liquidity broadly across the economy remains a challenge. Additional liquidity of around 3.5 percent of GDP has resulted in a liquidity surplus⁴². The average systemic liquidity surplus between March 27 and April 14, 2020 was Rs.4.36 trillion (US\$ 57.82 billion). TLTROs also provided liquidity at the longer end of the yield curve. However, efforts to channel liquidity to NBFCs and MFIs – which serve important sectors of the economy but do not have access to direct liquidity from the RBI and often cannot access capital markets due to lower ratings – have been only partially successful. TLTRO 2.0, which requires banks to invest proceeds in small and medium NBFC and MFI debt issuances, saw only 51 percent of funds utilized. Moreover, banks have grown their portfolio of government securities far in excess of the statutory requirement in January–March 2020, while the portfolio of corporate bonds and equities has declined sharply. Various measures that are being implemented to improve credit growth will be hampered by the prevalence of uncertainty and lenders' risk aversion.

The various measures have not eased – thus far – the challenge of raising financing in the current climate.

For example, NBFCs and even state governments continue to struggle to raise funds, despite bond yields remaining elevated. State governments managed to raise only 86 percent of the target amount on April 8, despite higher yields, especially for longer tenors. Top-rated NBFC issuers have also had to reduce the issuance size due to rising yields and lack of investors. While debt issuances by NBFCs increased in May and June 2020, the decrease in yields for NBFCs has been lower as compared to other issuers. The benchmark 10-year government bond yield increased between March 11 and mid-April, despite measures to boost liquidity. Increased risk aversion could continue to limit fresh non-sovereign debt issuances.

Small private banks, NBFCs, and MFIs could be more severely impacted than larger banks. The lack of a strong depositor base, exacerbated by the flight of deposits to larger banks post the Yes Bank crisis, could weaken the liquidity position and stability of small private banks. Customer confidence in small private banks has declined and may deteriorate further due to COVID-19, as customers might prefer PSBs with implied sovereign guarantee or larger, more stable private banks. The liquidity position of NBFCs, especially small and medium NBFCs, might deteriorate further due to difficulties accessing liquidity, potential slippages in the MSME and retail portfolios, selective access to bank financing due to risk averseness of banks, decreasing capital market funds and securitization, and lack of uniform applicability of RBI's loan moratorium⁴³. For instance, Bajaj Finance, a large NBFC, lost more than 350,000 customers and around Rs. 50 billion (US\$651 million) in assets under management in just 10 days. NBFC bond yields have also risen sharply, even for top-rated issuers. NBFCs are required to comply with provisioning requirements under IFRS 9, under which NPL provisioning and credit costs are more stringent, further stressing the NBFC sector. Microfinance institutions (MFIs) serve many low-income people with their saving and credit services. The economics of micro finance requires high repayment rates and therefore an increase in loan delinquencies and slippages in the repayment rate due to a collapse in clients' revenues would threaten the viability of MFIs.

A clearer picture of potential solvency issues for banks and NBFCs will emerge after the loan moratoriums and the NPA recognition standstill expire. Banks and NBFCs are allowed to offer a 6-month moratorium to borrowers and do not have to categorize these accounts as NPAs for the duration of the moratorium. As a result, the impact on NPAs and solvency can be determined only after the moratoriums end, when banks can track their borrowers individually to determine and segregate the permanent impact from the temporary impact and make appropriate provisions. While most banks have focused on retail lending in the past few years, a slowdown in demand could impact both growth and repayments in the retail portfolio, resulting in increased stress for banks. Further, the increased interconnectedness of banks and NBFCs might lead to a triple balance sheet problem⁴⁴. Pre-

⁴² Surplus liquidity available after lending by RBI to banks.

⁴³ NBFCs have to extend loan moratoriums to their borrowers while banks may choose whether to extend the loan moratorium to NBFCs.

⁴⁴ The increased interconnectedness of the banking and NBFC sector has led to a triple balance sheet problem, especially since the default by IL&FS in 2018. The deterioration of corporate balance sheets (especially real estate firms) led to stress for NBFCs, which ultimately caused asset quality in banks to decline.

COVID-19, the banking sector CRAR stood at 14.8 percent and the provision coverage ratio, at 65.4 percent (March 2020). An increase in NPAs could result in higher provisions and recapitalization, especially for PSBs. The RBI's July 2020 FSR revealed that NPAs could increase to 12.5 per cent by March 2021 under the baseline scenario, as compared to 8.5 percent in March 2020. Given the significant deterioration in economic conditions since then, there is an expectation that NPAs could increase in the short to medium term.

Policy focus once the health element of the current crisis reaches a manageable threshold will need to turn to alleviating financial sector stress by reviving lending while simultaneously improving NPL management. As economic activity is revived post lockdown, borrowers (especially MSMEs) will require credit to continue operations and for personnel expenses. Banks and DFIs must ensure the timely implementation of various schemes for improving NBFC and MSME liquidity while de-risking fresh lending through guarantees where they are available. After the moratoriums expire, banks must distinguish between temporarily stressed and non-viable accounts to prevent fresh NPLs. NBFCs and MFIs will need to play a key role in providing credit to underbanked clients and might need to continue to rely on bank borrowings until capital markets recover confidence in these lenders. The government has announced a 50 percent increase in its borrowings in H1 2020-21, which may further limit capital market funding to NBFCs and MFIs. Timely NPL resolution will be important to improve the capital position of banks and maintain the stability of the financial system.

In addition to bolstering credit growth, lenders will need to successfully manage the tapering of regulatory incentives, to ensure a smooth transition to usual regulatory norms. Lenders (especially banks) have received several regulatory relaxations to incentivize them to lend to sectors that need credit. Post COVID, lenders will need to ensure that these incentives are not used to disguise the actual status of accounts and do not lead to reduced credit discipline. Increased interconnectedness between the banking and NBFC sectors could increase the risk of contagion. The tapering of relaxations in liquidity and capital norms over the next few quarters could add further stress to banks especially with regards to NPLs. This could necessitate another round of recapitalization for PSBs and increasing contingent liabilities for the government.

6. Public Finance

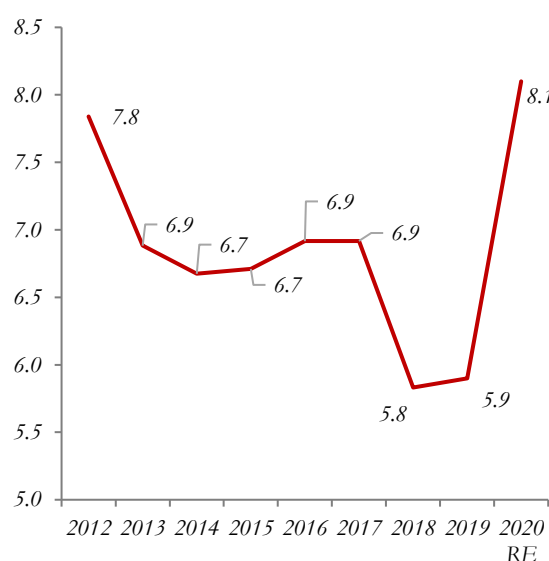
Following a decline over the past few years, the fiscal deficit increased in FY19/20, as real GDP growth slowed even before the COVID-19 outbreak, resulting in slower growth in tax revenue collection; and due to the corporate tax cut announced by the central government and increased spending by both the central and state governments. The COVID-19 outbreak and the subsequent lockdown are likely to add to the fiscal stress, and the central and state governments will have to confront the ongoing crisis with limited fiscal space. General government debt has risen, largely due to slow economic growth and increasing primary deficits. However, since most of India's public debt is denominated in local currency, is locally held, and is long term, it is generally considered sustainable.

a. General government

After declining gradually for six years since FY11/12, the general government deficit rose sharply in FY19/20. In contrast, states' fiscal deficit moderated in FY17/18 after rising continuously over the previous six years. While the general government deficit reached 5.9 percent of GDP in FY18/19, it could rise to 8.1 percent in FY19/20⁴⁵ (Figure A.55) primarily on account of weak tax revenue growth and fiscal measures (of which a corporate tax cut announced by the Centre in September 2019 is the most significant) (Figure A.56). With the growth rate projected to turn negative, revenue growth will suffer substantially in FY20/21. The rise in expenditure to counter the shock is expected to lead to a widening of the fiscal deficit in FY20/21 to around 11 percent of GDP.

Figure A.55: Fiscal deficit of the general government reversed its declining trajectory in recent years...

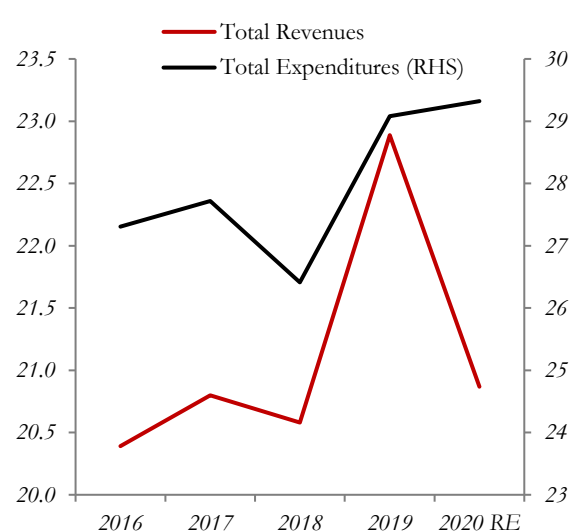
(General government fiscal deficit, percent of GDP)
*2020 RE is a World Bank estimate



Source: RBI, MoSPI

Figure A.56: ...primarily because of high expenditures and weak tax proceeds

(Total Expenditures and Revenues, percent of GDP)



Source: RBI, MoSPI

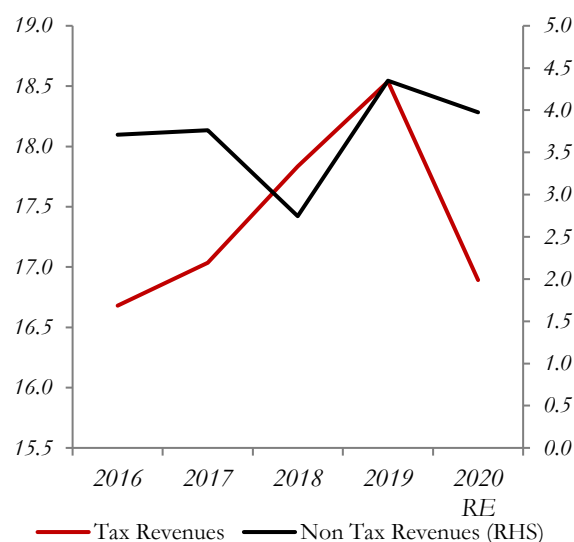
Even as revenue growth started to slow, much of the growth in expenditures in recent years was on account of current expenditures, which increased by almost 2 percentage points as a share of GDP in FY18/19 and are estimated to have increased further in FY19/20. For the states, the increase is attributable to the implementation of the Ujjwal DISCOM Assurance Yojana (UDAY), which resulted in

⁴⁵ The general government fiscal deficit figure for 2018-19 is based on fiscal accounts published by the central and state governments in their budgets for 2020-21, state fiscal accounts published by the Comptroller-Auditor General of India, and World Bank staff calculations. The fiscal deficit figure for 2019-20 is a World Bank estimate based on staff calculations.

higher interest payments on absorbed contingent liabilities,⁴⁶ whereas for the central government, the increase is mainly a result the so-called non-development spending (such as defence, interest payments, pensions and subsidies) and the introduction of a large-scale income transfer scheme for farmers. Current expenditures rose from 22.5 percent of GDP in FY15/16 to 24.4 percent in FY18/19 and are expected to grow further to 25.2 percent in FY19/20. Capital expenditure, on the other hand, declined as a share of GDP to 4.2 percent in FY19/20 from a high of 5.0 percent in FY16/17 (Figure A.58).

Figure A.57: Tax and non-tax revenues declined in 2019-20 after a rise in 2018-19 on account of lower-than-assumed tax buoyancy and weaker economic growth

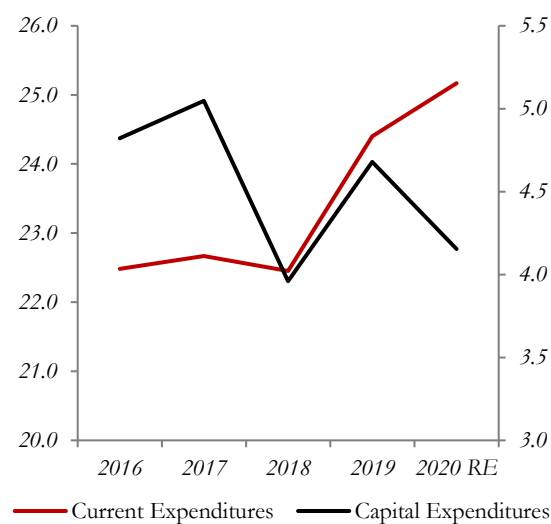
(Tax and Non-Tax revenues, percent of GDP)



Source: RBI, MoSPI

Figure A.58: Current expenditures contributed more to the growth of overall expenditures in 2019-20

(Current and Capital Expenditures, percent of GDP)



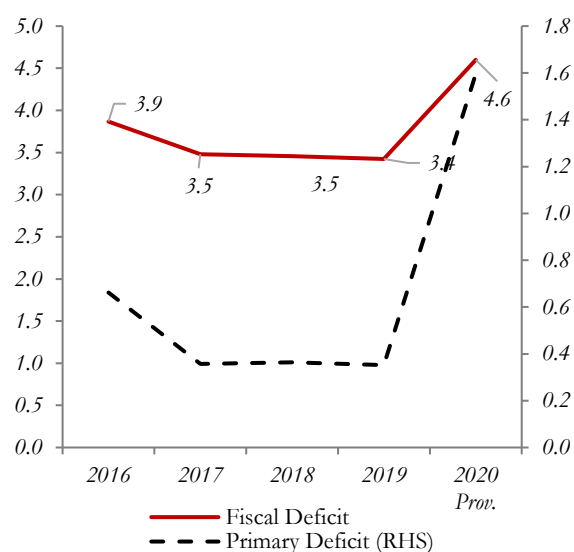
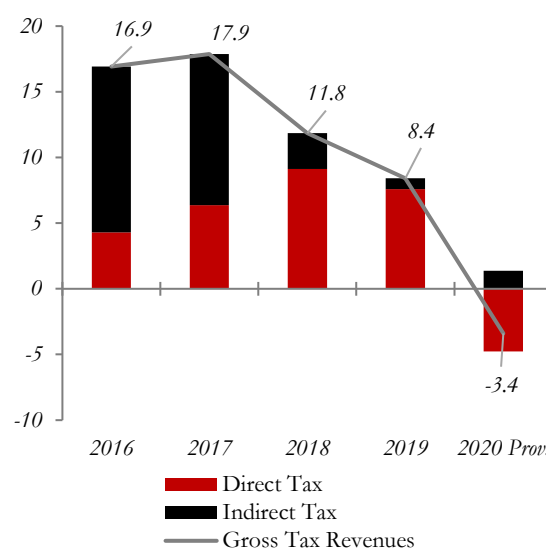
Source: RBI, MoSPI

b. Central government

After declining steadily to 3.4 percent in FY18/19, the centre's fiscal deficit rose to 4.6 percent of GDP (as per provisional accounts published by the Controller General of Accounts) in FY19/20 (Figure A.59) on the back of a decline in tax revenues and non-debt capital receipts. The slowdown in growth directly impacted both direct and indirect tax collection and this was compounded by the government's decision to cut corporate tax rates in order to boost private investment. Due to the considerable decline in revised estimates of revenue collection, compared with budget estimates, the government resorted to the FRBM escape clause to revise fiscal deficit targets upwards for FY19/20 and FY20/21.⁴⁷

⁴⁶ Under UDAY, states took over up to 75 percent of outstanding liabilities of loss-making electricity distribution companies during 2015-16 and 2016-17.

⁴⁷ The Budget speech refers to section 4(2) of the FRBM Act that stipulates that a deviation in the annual fiscal deficit target by not more than 0.5 percent of GDP will be justified under specific circumstances including "unanticipated structural reforms in the economy with unanticipated fiscal implications."

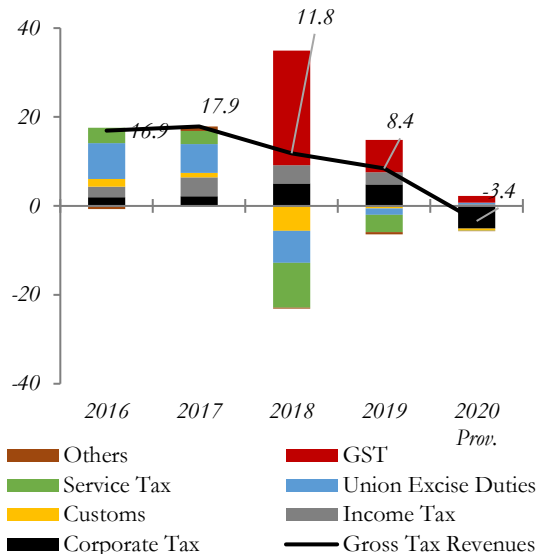
Figure A.59: The fiscal deficit and primary deficit both rose sharply in 2019-20*(Fiscal Deficit of the Central government, percent of GDP)**Source: MoF, CGA, MoSPI, World Bank staff calculations***Figure A.60: Gross tax revenue declined due to the economic slowdown and tax cuts***(Contribution to gross tax revenues growth, percent of GDP)**Source: CGA, MoSPI, World Bank staff calculations*

Gross tax revenues declined during FY19/20 with lower-than-budgeted receipts from both direct and indirect taxes, especially the corporation tax and GST. The centre's gross tax collections came in at 9.9 percent of GDP during FY19/20, after three consecutive years above 11 percent. Nominal growth of both direct and indirect taxes fell, with direct taxes growth turning negative according to provisional accounts (Figure A.72).⁴⁸ Direct taxes declined as a share of GDP, mainly due to the corporate tax cut earlier in the year whereas indirect taxes were depressed by compliance challenges associated with the GST, which led to subdued GST collections.⁴⁹ Despite a rise in excise duties in the past years (when global crude prices declined) and in spite of an increase in custom duties across a wide range of products, excise and custom duties collections also dropped considerably as trading volumes declined.

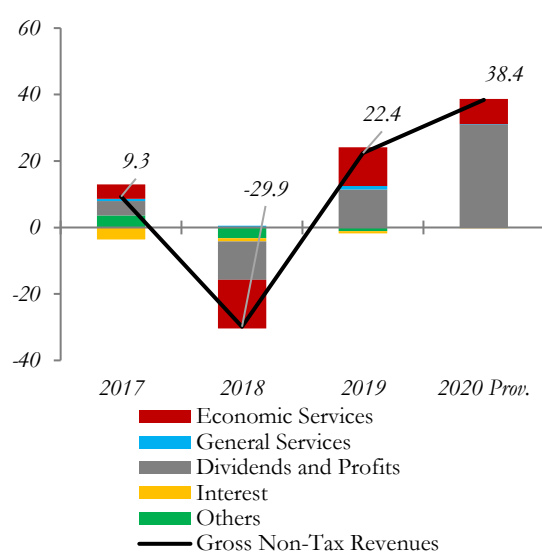
Consequently, the contribution of direct taxes to the overall growth of gross tax revenues was negative, a sharp reversal in the trend from FY17/18 and FY18/19, when they contributed 77 and 90 percent, respectively, to revenue growth. Excise duties stood at 1.2 percent of GDP in 2019-20, lower than the annual average of 1.8 percent during FY11/12 to FY17/18. Similarly, custom duties amounted to just 0.5 percent of GDP, significantly lower than an annual average of 1.5 percent in the same period (Figure A.61).

⁴⁸ Direct taxes declined by 8.7 percent in 2019-20 vis-à-vis 15.3 percent average growth from 2016-17 to 2018-19, whereas indirect taxes grew by 3.1 percent in comparison with an almost 10 percent average growth during the same period of reference.

⁴⁹ In September 2019, the government announced major reduction in tax for corporates in a bid to boost investments. The effective tax rate prior to the announcement ranged between 26 and 34 percent. With the government's move, corporates were given an option to pay a lower tax rate of 22 percent (25.17 percent including cess and surcharges) if they did not claim any exemptions or incentives. As per government estimates, the tax cut resulted in forgone revenues to the tune of 0.7 percent of GDP.

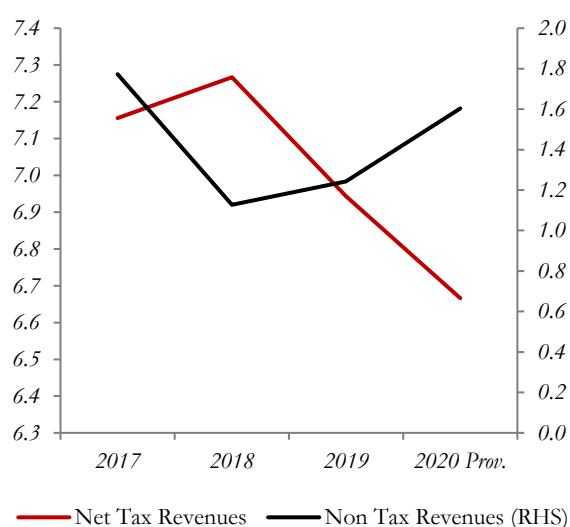
Figure A.61: Corporate taxes had a negative contribution to revenue growth*(Contribution to gross tax revenues growth, percent)*

Source: MoF, CGA, MoSPI, World Bank staff calculations

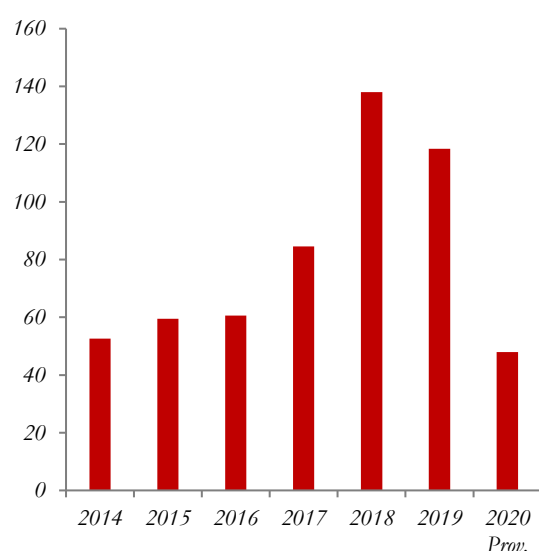
Figure A.62: The surplus capital transfer from the RBI contributed the most to non-tax revenues*(Contribution to gross non-tax revenues growth, percent)*

Source: MoF, CGA, MoSPI, World Bank staff calculations

Non-tax revenues increased in FY19/20 due to a higher-than-expected surplus capital transfer from the RBI. Non-tax revenues, including interest receipts, dividends, user fees, and spectrum auctions, increased from 1.2 percent of GDP in FY18/19 to 1.6 percent in FY19/20 (Figure A.62). The rise was primarily thanks to a one-time surplus-capital transfer by the RBI.⁵⁰ On the other hand, non-debt capital receipts declined as a share of GDP to lower than their decadal average of 0.4 percent. Central government disinvestment receipts are estimated to have fallen to less than 50 percent of the budgeted amount, as plans for disinvestment were derailed due to a deterioration of financial market conditions in March 2020 (Figure A.64).

Figure A.63: Tax revenues, net of transfers to states declined despite a downward adjustment in devolved taxes*(Tax and non-tax revenues of Centre, percent of GDP)*

Source: MoF, CGA, MoSPI

Figure A.64: Disinvestment receipts fell well below the budget estimates for 2019-20*(Actual disinvestment, percent of budgeted)*

Source: DIPAM, World Bank staff calculations

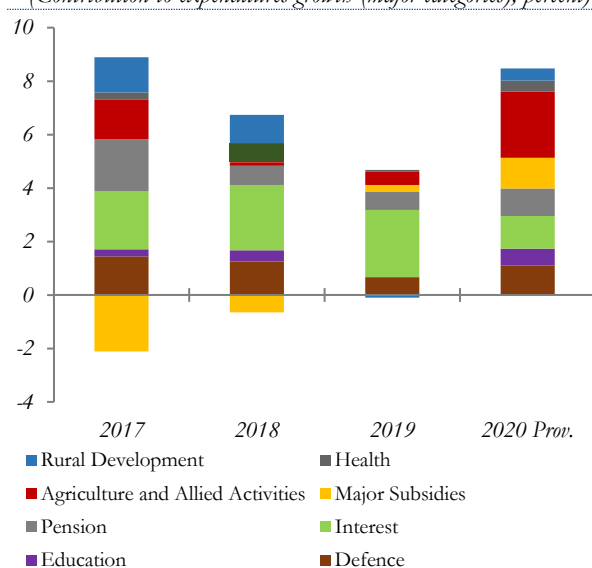
⁵⁰ In August 2019, the RBI accepted the Bimal Jalan committee recommendations and approved surplus-capital transfer to the government (RBI dividend) to the tune of INR 1.76 trillion. The dividend was INR 0.58 trillion above the budgeted figure of INR 0.9 trillion with INR 0.28 trillion given to the government in FY 2018-19 as interim dividend.

The central government also increased spending in response to the economic slowdown. Total expenditures increased from 12.2 percent of GDP in FY18/19 to 13.2 percent in FY19/20, with almost 90 percent of the rise driven by an increase in current spending. This amounted to a total expenditure growth of 16 percent, one of the highest in recent history, stemming from a rise in transfers for centrally sponsored schemes (CSS) and in grants to the states (as recommended by the Finance Commission). Current expenditures increased from 10.6 percent of GDP in FY18/19 to 11.6 percent in FY19/20, whereas capital expenditures saw only a marginal rise from 1.6 percent of GDP to 1.7 percent (Figure A.66). Capital expenditures have remained under 2 percent of GDP every year.⁵¹

In terms of the sectoral contribution to spending growth, the so called non-development categories such as interest payments, pension, subsidies, and defence spending contributed over a quarter of the increase. The single largest driver of the increase in spending was the agriculture and allied activities sector, which saw a 91 percent increase in spending (Figure A.65). This was mainly attributable to the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) program, a DBT scheme that entitles eligible farmers to income support of INR 6000 each year. Health sector spending increased by a more modest 17 percent despite the announcement of the Ayushman Bharat Pradhan Mantri Jan Aarogya Yojana program, a health insurance scheme that aims to provide coverage to over 107 million households in the bottom 40 percent of the population. As a share of GDP, health spending remains low at about 0.3 percent.

Figure A.65: Non-development spending and agriculture account for over half of the increase in total spending

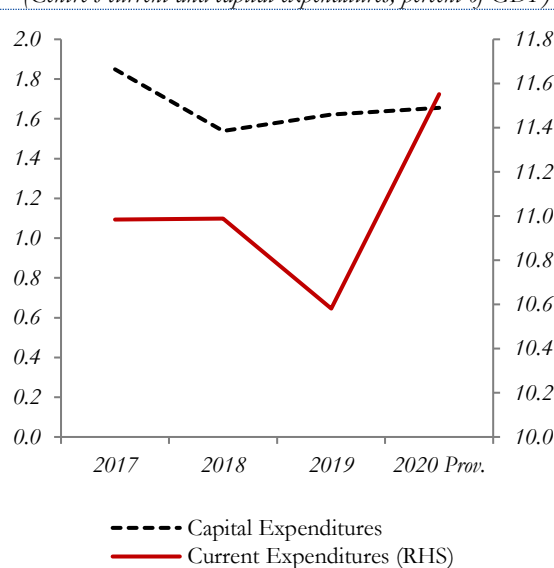
(Contribution to expenditures growth (major categories), percent)



Source: MoF, CGA, MoSPI, World Bank staff calculations

Figure A.66: Current spending shows a countercyclical increase, while capital expenditure growth is subdued

(Centre's current and capital expenditures, percent of GDP)



Source: MoF, CGA, MoSPI

The central government's overall budgetary expenditure on major subsidies has gradually declined from the peak of 2.5 percent in FY12/13 to about 1.1 percent in FY19/20 (Figure A.67). While the subsidies were lower in FY18/19, at 1.0 percent of GDP, the increase in FY19/20 was mainly due to the rolling over of unpaid fuel and fertilizer arrears. While food and fertilizer subsidies remained stable at 0.5 percent and 0.4 percent of GDP respectively, fuel subsidies increased by about 35 percent relative to FY18/19, to 0.2 percent of GDP. However, actual subsidies on both food and fertilizer are likely to have been higher than the revised estimates suggest due to extra-budgetary resources and borrowing from the NSSF⁵². The Food

⁵¹ Capital expenditures as a share of GDP have firmed up in recent years with the last ten years' average at 1.7 percent. Except year 2015-16 when capex to GDP ratio stood at 1.5 percent, it has ranged between 1.6 percent and 1.8 percent of GDP, i.e. +/- 0.1 percentage point difference from an average of 1.7 percent every year since 2011-12.

⁵² A detailed statement on "Extra Budgetary and Other Resources (Government Fully Serviced Bonds and NSSF Loans)" has been included in the FY20/21 Budget.

Corporation of India borrowed INR1.1 trillion (about 0.5 percent of GDP) in FY19/20, from the National Small Savings Fund (NSSF), to fund subsidy claims unfunded by budgetary allocation. Rashtriya Chemicals and Fertilizers Ltd. (a publicly-owned fertilizer company) and other publicly-owned entities have also borrowed from the NSSF.⁵³

Figure A.67: Subsidy expenditure remained largely stable

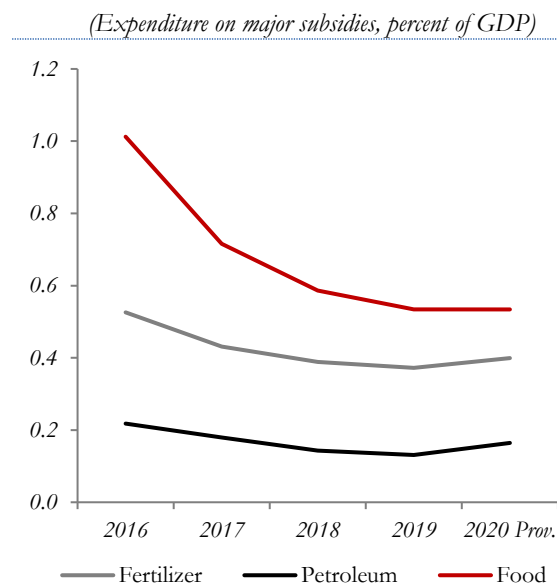
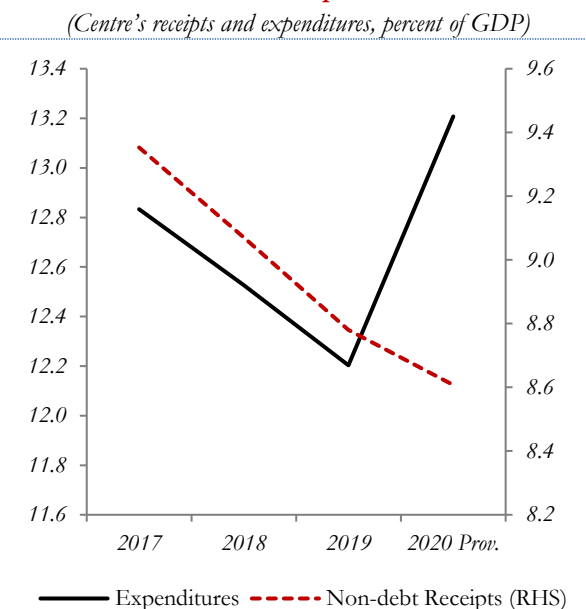


Figure A.68: Expenditure growth outpaced growth in receipts



Overall, the centre's fiscal deficit increased from the revised estimate of 3.8 percent of GDP to 4.6 percent in FY19/20. The provisional estimates reflect information for the whole year but are subject to revisions when the final fiscal outturn is presented by the government. The provisional data indicate that the COVID-19 outbreak had a significant negative effect on revenue collection, mainly due to a shortfall in direct taxes as well as taxes on international trade, which are dependent on consumption and trade volumes. This was marginally offset by an increase in taxes on fuel as global oil prices declined. The government could also not meet the revised estimate amount target for disinvestment, as financial markets recorded sharp declines in March and disinvestment transactions were postponed.

A large shortfall in revenues could lead to an increase in the fiscal deficit in FY20/21. According to monthly fiscal accounts for April and May, tax revenues in the first two months of the fiscal year declined by more than 70 percent, compared with the same period in FY19/20. However, spending was only marginally below last year's levels. In the context of the nationwide lockdown as well as the extension of most tax filing deadlines till at least June 30th, the sharp decline in revenues was largely expected. Nonetheless, the data for April and May highlight the effect of the revenue shortfall on the central government's overall fiscal situation as the fiscal deficit increased to nearly 60 percent of the budgeted amount. The decline in central tax revenues will also have knock-on effects on state government finances as the divisible pool of central taxes will also shrink.

⁵³ According to the "Statement of Extra Budgetary & other Resources (Govt. fully serviced bonds and NSSF loan)" of the FY20/21 Budget, two companies under the Department of Fertilizers had borrowed INR 31.2 billion from the NSSF in FY19/20 (as per revised estimates).

Box A.3: Economic stimulus and reform measures announced by the central government to alleviate the impact of the COVID-19 outbreak

Soon after a nationwide lockdown was announced on March 23rd, the central government announced the Pradhan Mantri Garib Kalyan Yojana (PMGKY), a package of welfare measures to address the most vulnerable sections of the population. Following the extension of the lockdown by several weeks, on May 12th, the Prime Minister announced another economic stimulus package, the Atma Nirbhar Bharat Abhiyan, amounting to INR 20 trillion (USD 264 billion). The details of the package were announced in several tranches and the economic package includes the measures announced under the PMGKY, direct fiscal support, indirect government support in the form of credit guarantees, tax measures, policy reforms and liquidity measures taken by the RBI (discussed separately).

Measures involving direct government spending:

1. Under the Pradhan Mantri Gareeb Kalyan Anna Yojana (PMGKAY), an additional allocation under the Public Distribution System (PDS) had been made for about 800 million existing beneficiaries for three months (additional 1kg pulses per household, 5kg wheat or rice per individual in the household) and access to the benefits has been further extended till November 2020. Also, 5kg food grains per person per month were given free of cost in May and June to approximately 80 million migrants /stranded migrants who were not covered under either the National Food Security Act (NFSA) or State Scheme PDS Cards. The additional cost of both measures will be borne by the central government.
2. Advance release of income support of INR 2000 under the Pradhan Mantri-Kisan Samman Nidhi (PM-KISAN) for 87 million farmers.
3. Increased budgetary allocation of INR 400 billion for Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and an increase in daily wage rates under the scheme from INR 182 to INR 202.
4. Transferring INR 1000 to all beneficiaries under the National Social Assistance Programme (NSAP) for the elderly, widows, and disabled receiving social pensions (35 million beneficiaries).
5. Transferring INR 500 per month to all female Jan Dhan Accounts for three months.
6. Providing free cylinders for three months to poor Pradhan Mantri Ujjwala Yojana beneficiaries (83 million households).
7. The Central Government will pay Employee Provident Fund (EPF) contributions for employees and employers for six months. This is targeted to establishments with up to 100 workers and where 90% of workers earn less than INR 15,000 per month. This is expected to cover 1.8 million employees and 400,000 establishments. The rate of EPF contributions has also been reduced from 12 percent to 10 percent for three months (May-July) to provide additional liquidity to both employers and employees.
8. Accelerated release of all payables due from the government to MSMEs within a 45-day timeframe.
9. Infusion of capital into the Credit Guarantee Trust Fund for Micro and Small Enterprises and National Credit Guarantee Trust Company to support credit guarantee measures for MSMEs.
10. Creation of a new Fund of Funds for equity infusion in viable MSMEs with a corpus of INR 100 billion.
11. Interest subsidy on housing loans and working capital loans under various existing government schemes.
12. New schemes for the modernization of agriculture and allied activities such as farm-gate infrastructure, micro food enterprises, fisheries, animal husbandry, herbal cultivation, and beekeeping.
13. Investment in evacuation infrastructure in the coal sector to increase production.
14. Increased viability gap funding for social infrastructure projects from the earlier 20 percent to 30 percent.
15. Increased expenditure on health services and equipment being released to the states and implementing agencies
16. Combining 25 government schemes to provide livelihood opportunities to returning migrant workers and other rural workers under a rural public works scheme, the Garib Kalyan Rojgar Abhiyaan, in 116 districts across six states.
17. An interest subvention scheme for a period of 12 months for the smallest category of loans under the Pradhan Mantri MUDRA Yojana for the benefit of micro and small enterprises.

Measures involving indirect government support:

1. Credit guarantees for the MSME sector to facilitate increased credit off-take, amounting to INR 6.2 trillion.
2. Full government guarantee for investments in non-banking financial companies, housing finance institutions, and mutual fund institutions (NBFCs, housing finance institutions, and MFIs) under a special liquidity scheme amounting to INR 300 billion.
3. Partial credit guarantee for borrowings of lower-rated NBFCs, housing finance institutions, and MFIs.

4. Special credit facility for street vendors with liquidity provision of INR 50 billion to channelize credit through banks.
5. Additional refinance support of INR 300 billion for regional rural banks and co-operative banks through the National Bank for Agriculture and Rural Development.
6. Increased coverage under the Kisan Credit Card scheme for concessional credit for farmers.
7. Liquidity injection of INR 900 billion in power distribution companies at the state level through loans against receivables given by the Power Finance Corporation and the Rural Electrification Corporation (both central public sector enterprises).
8. State governments have been advised to use funds in the Building and Other Construction Worker Funds and Compensatory Afforestation Funds to provide relief and employment opportunities to registered construction workers and other vulnerable groups.
9. The borrowing limit for state governments has been increased from 3 percent of GSDP to 3.5 percent for FY 2020-21, unconditionally. This can be increased to as much as 5 percent of GSDP, conditional on certain reforms.

Tax measures:

1. Extension of the due date for filing income tax returns for previous fiscal years.
2. The tax rate for advance tax collections on certain domestic transactions, in the form of the tax deducted at source (TDS) and tax collected at source (TCS), was cut by 25 percent.
3. Reduction in the interest rate on late payment of several taxes and no initiation of penalties or prosecution on non-payment until June 30.
4. Extension of due date for payment under Vivad se Vishwas, a scheme for the resolution of income tax disputes, until December 31, 2020.
5. The deadline for claiming tax deductions under various laws has been extended.
6. The lockdown period will be excluded for the purpose of determination of tax residency for individuals whose stay in India has been prolonged due to suspension of normal international air travel.
7. Several tax filing deadlines were extended from March 31 to June 30, including the deadline for Goods and Services Tax for small taxpayers. Late fees and penalties were also waived for this period.⁵⁴

Policy reform measures:

1. The definition of MSMEs has been revised with a sizeable increase in the investment limit, and firm turnover has been introduced as an additional criterion for classification. The classification framework for the manufacturing and services sectors have been unified. This will allow smaller firms to invest more without losing access to government programs and concessional credit for MSMEs.
2. Agricultural food commodities have been deregulated under the Essential Commodities Act to enable better price realization for farmers. The central government will also introduce a law to facilitate barrier-free inter-state trade and reduce restrictions on how farmers can market their produce. A legal framework will be established for agricultural product price and quality assurance.
3. Investment regulations have been eased in several sectors that were previously restricted for private firms. These include coal exploration and mining, minerals, defence production, aerospace activities, and atomic energy.
4. A revised public sector enterprise policy has been announced wherein all sectors (including strategic ones) would be opened to the private sector; the number of public sector enterprises in strategic sectors would be limited to four; public sector enterprises in non-strategic sectors would be privatized in due course.
5. The government is considering expanding the definition of inter-state migrant workers to include all those workers who are either recruited by a contractor or employer and those who migrate to another state on their own. It also proposes to provide portability of benefits for building and construction workers.

Fiscal Impact

While the overall size of the economic stimulus package has been pegged at INR 20 trillion, the fiscal impact of the package in terms of central government spending in FY 2020-21 is much lower. Market analysts have provided estimates ranging from 0.7 to 1.2 percent of GDP. Overall, it seems certain that the fiscal deficit outturn would be much larger than the budgeted 3.5 percent, both due to softer revenue collection and additional expenditure on

⁵⁴ The list of tax measures is not exhaustive and several other measures have been announced by the Department of Revenue in relation with COVID-19.

account of the relief measures. However, it is difficult to estimate the exact size of the fiscal deficit due to the high level of uncertainty about economic growth.

Box A.4: Financing measures adopted by the central government

In anticipation of the likely shortfall in revenue receipts and increased spending following the COVID-19 outbreak, several measures have been adopted to ensure adequate financing for the central government:

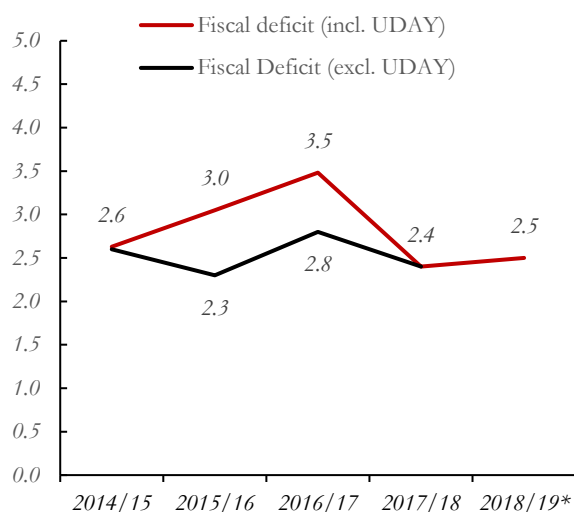
1. The central government has increased the excise duty on petrol and diesel on two separate occasions since early March. In total, the excise duty on petrol has increased by INR 13 per litre and that on diesel by INR 16 per litre (including road and infrastructure cess).
2. The central government's estimated gross market borrowings for 2020-21 have been increased from the budget estimate of INR 7.8 trillion (about USD 103 billion) to INR 12 trillion, according to the revised issuance calendar for government securities
3. The RBI, in consultation with the government has also enhanced the limit on Ways and Means Advances for April–September 2020-21 to INR 1.2 trillion from INR 750 billion for the same period in 2019-20.

c. State government

The fiscal outcomes of the state governments improved in FY18/19. After two years during which the states' combined fiscal deficits increased (in FY15/16 and FY16/17 due to loans extended to power distribution companies under the UDAY), they outperformed revised estimates, reaching 2.5 percent in FY18/19. According to preliminary fiscal accounts published by the CAG as well as fiscal accounts published by the states themselves, the actual fiscal deficit was about 0.4 percentage points lower than the revised estimate for FY18/19.

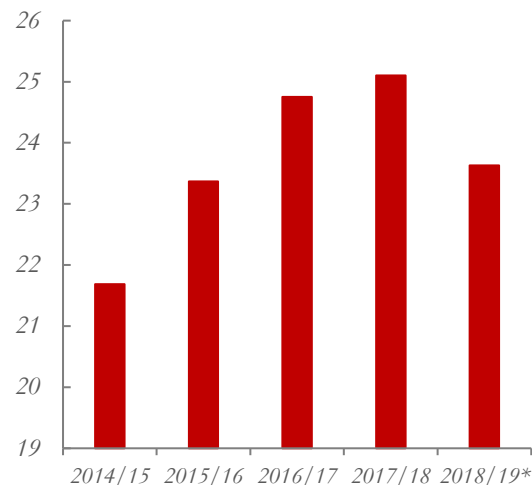
However, the opposite happened in FY19/20 due to the slowdown in growth. According to revised estimates for 18 states (published along with their respective state budgets for FY20/21), the fiscal situation of sub-nationals worsened. The revised estimates for these 18 states indicate an increase in the fiscal deficit to at least 3.0 percent of combined GSDP (Figure A.69). However, these revised estimates do not account for the month of March 2020 and the COVID-19 outbreak and the subsequent nationwide lockdown will have affected revenue collection during the second half of the month.

Debt fell sharply as a share of GSDP in FY18/19. Consolidated data on outstanding liabilities of states is only available from the RBI until March 31st, 2019. They indicate a gradual decline in debt in FY18/19. More recent data is only available for 18 states and indicate that the decline in debt was much sharper in FY18/19, in line with the better-than-expected fiscal performance of the states lowering the borrowing requirement (Figure A.70).

Figure A.69: The fiscal deficit increased in FY19/20 following two years of relative fiscal prudence...*(Fiscal deficit, percent of GSDP)*

Source: RBI, CAG, state finance departments and World Bank staff calculations

Note: Figures for FY18/19 are based on data from 18 state budgets

Figure A.70: ...while the decline in borrowing post-UDAY resulted in lower debt*(total outstanding debt, percent of GSDP)*

Source: RBI, state finance departments and World Bank staff calculations

Note: Figures for FY18/19 are based on data from 18 state budgets

Both revenue shortfalls and increased spending contributed to the increase in the fiscal deficit in FY19/20. Based on the revised estimates for 18 states, we can establish some stylized facts about fiscal dynamics in FY19/20. Comparing the revised estimates (RE) for FY19/20 with FY18/19, we see that growth in spending (16.5 percent) outpaced revenue growth (13.1 percent). As a result, the combined fiscal deficit increased by over 40 percent in nominal terms.

On the revenue front, there were two main contributing factors to the shortfall — of taxes from the central government and slow growth in states' own revenues. First, the central divisible pool of taxes that is devolved to states declined by almost 20 percent from budget estimates ((BE) to RE and by 6 percent, compared with FY18/19 (this is largely attributable to the corporate tax cut announced in September 2019 as well as a downward adjustment to account for the excess funds devolved to states in the previous fiscal year). Second, the states' own tax revenues lagged behind budget estimates and grew by about 11.5 percent compared with FY18/19, because of the slowdown in economic growth in FY19/20. Transfers, however, grew significantly as the shortfall in state GST collection was partially compensated by GST compensation grants from the centre.

While in the past, state governments have cut capital outlays to meet their fiscal deficit targets, they did not do so in FY19/20. Revised estimates suggest that both capital outlays and current spending were higher than budgeted in FY19/20. The increase in spending was entirely discretionary, as non-discretionary spending (expenditure on salaries, pensions, and interest payments) declined relative to BE. While more granular data on spending that is comparable across states is not available, many states increased spending on rural welfare programs and the agriculture sector. According to the RBI, nine states had active farm loan waiver schemes in FY19/20, six states also introduced income support schemes over and above the centre's PM-KISAN scheme.

State finances are likely to come under pressure following the COVID-19 outbreak and the subsequent lockdown. First, on the expenditure front, nearly all states have announced welfare measures that include increased entitlements of subsidized rations through the PDS (over and above those announced by the central government) as well as increased direct cash transfers to beneficiaries of pension schemes. On the revenue front, the states' capacity to raise revenues has been impacted directly by the nationwide lockdown, since a large part of own-tax revenue is derived from excise and other taxes on fuel and liquor,

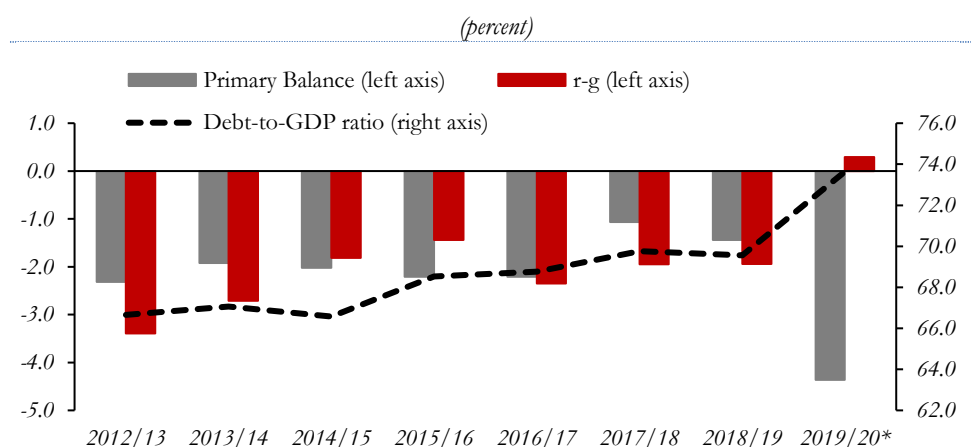
whose sales have plunged. The expected decline in growth in incomes and consumption will also affect state GST collections.

Several measures have been announced to ease fiscal pressures on states. The central government has released the states' share of central taxes for the month of April on the basis of budget estimates of revenue collection for FY20/21, even though it is unlikely that the centre will be able to meet this revenue target. Coupled with the revenue deficit grants awarded by the 15th Finance Commission, this will partly compensate for the expected shortfall in states' own tax revenues. On the borrowing front, the RBI has increased the limit on ways and means advances for the first half of FY20/21 by 60 percent for all states. The borrowing limit for all states has been increased from 3 percent to 3.5 percent of GSDP for 2020-21 and can be further increased up to 5 percent if state governments enact a set of reforms outlined by the centre. According to the Ministry of Finance, although the states could borrow as much as 50 percent of their borrowing limit for the first half of FY20/21 in April, only 14 percent of the available borrowing limit for states was utilized.

d. Government Debt⁵⁵

After declining over the last decade, general government debt has risen in recent years. While the increase in the general government debt-to-GDP ratio was marginal in FY18/19, debt is estimated to have increased significantly in FY19/20 to 72.0 percent, due to declining real growth and a rise in the primary deficit for both the centre and states (Figure A.71).

Figure A.71: The increase in the primary deficit and the slowdown in growth contributed to the increase in debt



Source: RBI, MoF, MoSPI and World Bank staff calculations

Note: Figures for 2019-20 are World Bank estimates; r-g is the difference between the nominal effective interest rate and the nominal rate of GDP growth, weighted by the previous period's debt-to-GDP ratio

The central government's debt has increased, mainly through domestic borrowing. The centre's debt level rose from 49.6 percent of GDP to 51.0 percent (Figure A.72), mainly on account of a rise in internal liabilities (internal debt, specifically dated securities and treasury bills, and small savings deposits) from 46.9 percent of GDP in 2018-19 to 48.4 percent in FY19/20. This includes government liabilities on account of extra-budgetary resources (EBR), which are borrowings by autonomous bodies or central public sector enterprises that are fully serviced by the central government. These have steadily increased as a share of GDP from less than 0.1 percent in FY16/17 to an estimated 0.7 percent in FY19/20. External liabilities, also increased by 0.2 percentage points to 2.9 percent of GDP during the same period.⁵⁶ Over the last

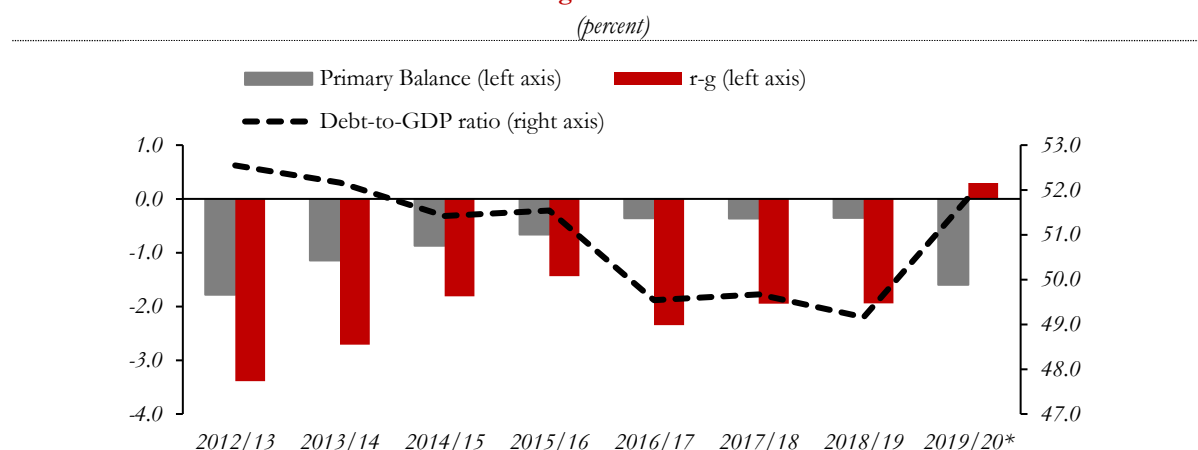
⁵⁵ Government debt includes internal, external, and public account liabilities, as well as the extra-budgetary resources (bonds fully serviced by the government) of the central government.

⁵⁶ External liabilities calculated at current exchange rate.

decade, the centre's debt has gradually declined from 57.3 percent of GDP in FY09/10 and stabilized in FY18/19 (except for a small increase in FY17/18).⁵⁷

Off-budget financing of government spending through borrowing by public sector enterprises has been increasing and been highlighted in the latest budget. The government has also published data on financial support extended to the Food Corporation of India, two publicly owned companies, and the Building Materials & Technology Promotion Council through loans from the NSSF. This financial support covers the gap between these entities' total requirement for funds and the budgetary provisions made in that year. The quantum of this support has also steadily increased from 0.5 percent of GDP in FY16/17 to an estimated 2.0 percent in FY19/20.

Figure A.72: In 2019-20, the rising primary deficit and the decline in real GDP growth have pushed up central government debt



Source: MoF, RBI, MoSPI, and World Bank staff calculations

Note: Figures for 2019-20 are World Bank estimates; r-g is the difference between the nominal effective interest rate and the nominal rate of GDP growth, weighted by the previous period's debt-to-GDP ratio

At the sub-national level, debt levels have risen since FY15/16. While the rise immediately after FY15/16 was on account of states taking over debt previously held by loss-making electricity distribution companies, the increase in the last few years can be mainly attributed to slowing growth and a rise in gross primary deficits.⁵⁸ After reaching a low of 21.7 percent of GDP in FY14/15, the debt ratio of states has gradually increased to 25.8 percent in FY19/20.⁵⁹ However, even this is based on budget estimates for FY19/20 published between February and April 2019 and revised estimates for the same period are likely to show an increase in borrowing and debt.

⁵⁷ Estimates of the center's outstanding liabilities up to 2018-19 are from the RBI's Database on Indian Economy and from the Union Budget 2020-21 and the Public Debt Management Quarterly Report for January-March 2020 for the next year. Estimates of the states' outstanding liabilities up to 2019-20 are from the RBI.

⁵⁸ As part of the UDAY scheme, state governments realized up to 75 percent of outstanding contingent liabilities owed to loss-making electricity distribution companies, which increased their debt by 3 percentage point to 24.7 percent of GDP in 2016-17.

⁵⁹ Because of a rise in the debt burden due to UDAY, states faced higher interest expenditure in the succeeding years. Several states had announced farm loan waivers programs between 2016-17 and 2018-19. As per RBI's study of state finances 2019-20, while the magnitude and coverage of loan waivers varies across states, the total fiscal cost of the announced bailouts varied between 0.1 percent and 0.3 percent of GDP in the mentioned years, particularly as they formed more than 1 percent of state governments' overall expenditure.

PART B – Outlook and special topics

1. Global Economic Developments and Outlook

The COVID-19 pandemic has brought a global economic shock of enormous magnitude, with steep recessions in many advanced and emerging market and developing economies (EMDEs). Global output is expected to contract severely in 2020, despite strong policy support in many countries. The shock is highly synchronized across the world and it has deeply impacted financial, goods, services, and commodity markets; with associated implications for trade, capital, and remittance flows. The outlook remains highly uncertain and there are large downside risks including extended or recurrent infection outbreaks.

a. Global growth

The ongoing COVID-19 pandemic is posing one of the most severe shocks to the world economy since World War II. The broad reach of the outbreaks – and their consequences on financial markets, commodity prices, manufacturing, services, tourism, trade, global supply chains, and confidence – has extended to virtually all regions of the world (Figure B.1). Against this backdrop, the global economy is expected to contract by 5.2 percent in 2020 (World Bank 2020a). However, the outlook is marked by extreme uncertainty. Developments continue to be volatile with severe downside risks, such as a delayed revival in confidence or more permanent disruptions to global value chains, all of which could bear long-term legacies.

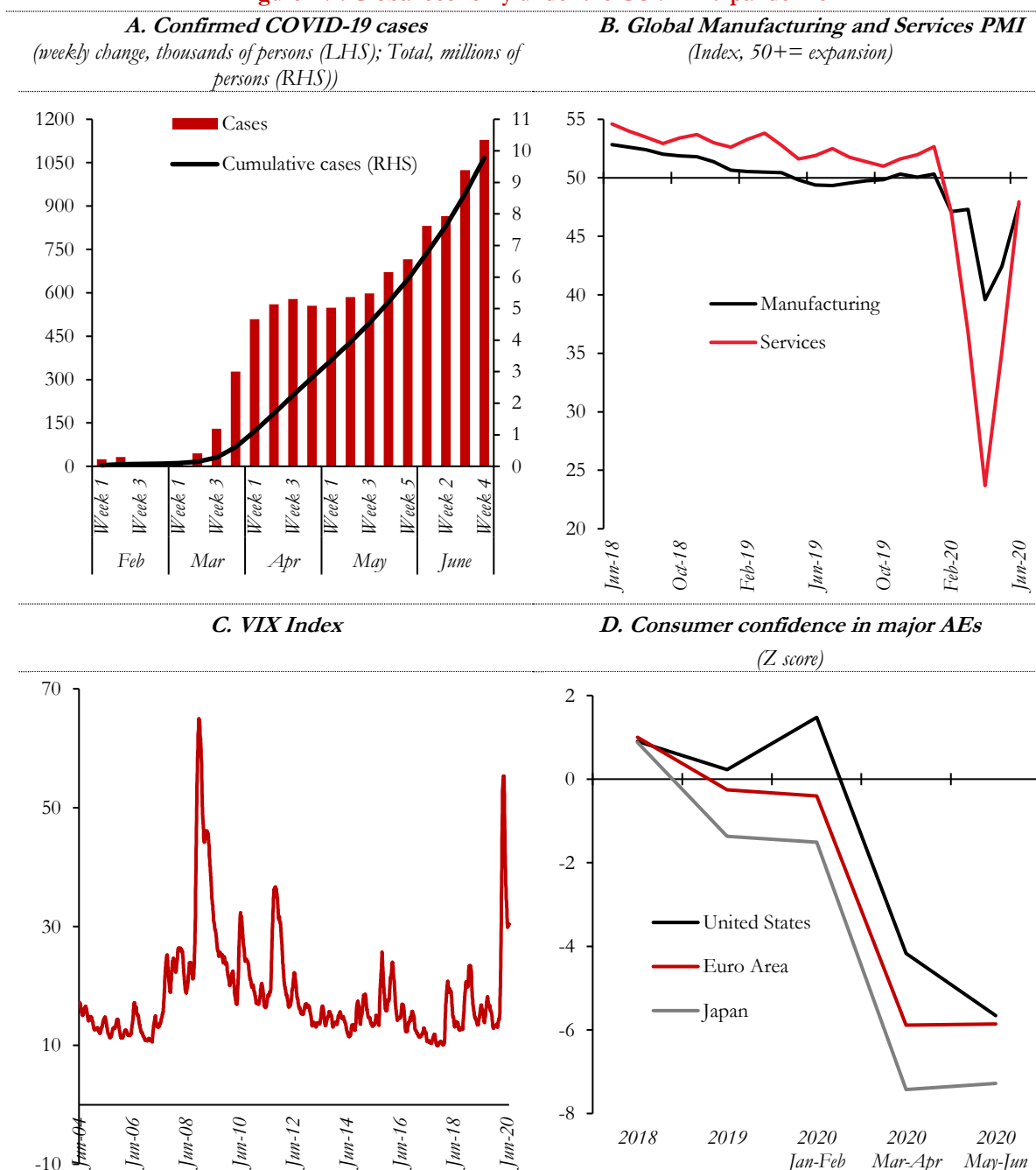
The global growth outlook will be driven by contractions in advanced economies and EMDEs, and will be highly synchronized across the globe. The contraction in advanced economies will be especially sharp, at 7 percent, while EMDEs are also expected to contract significantly by 2.5 percent. Assuming that the pandemic will recede later in 2020 and that cross-border spillover effects from contracting global growth ease somewhat in the second half of 2020, activity is expected to recover somewhat in the second half of the year. Global growth is expected to resume and experience a moderate recovery of 4.2 percent in 2021.

b. Growth outlook in advanced economies

Advanced economies have experienced an unprecedented collapse in activity. Their output is now projected to decelerate dramatically, from an expansion in 2019 to a contraction of 7 percent in 2020.

Growth in the US, Euro Area, and Japan is expected to contract substantially in 2020, reflecting the severe impact of the pandemic in the first half of the year and assuming a gradual recovery in the second half. In the US, the outbreak has been associated with a sharp collapse in services activity and a rise in unemployment claims. In the Euro area, all major member countries are expected to experience recessions. In Japan, outcomes earlier in the year were already weaker-than-expected, and the pandemic will accentuate the scope of downward revisions.

In 2021, growth in major advanced economies is expected to rebound and return to positive. This assumes that coronavirus-related effects fade, that the effects of large-scale policy support in the US, Euro Area, and Japan materialize as planned, and that there is a recovery in consumer and investor confidence.

Figure B.1: Global economy under the COVID-19 pandemic

Sources: Chicago Board Options Exchange; Haver Analytics, Johns Hopkins University, World Bank.

A. Based on weekly data. Last observation is final week of June.

B. Manufacturing and services are measured by Purchasing Managers' Index (PMI). PMI readings above (below) 50 indicate expansion (contraction) in economic activity. Last observation is June 2020.

C. Market volatility index based on US S&P 500 Options (VIX). X-axis label denotes month-year. 30-trading day moving averages. Last observation is June 30, 2020.

D. AE=advanced economies. Consumer confidence index for each economy is normalized using mean and standard deviation from 2015-19. Denotes period averages of monthly data.

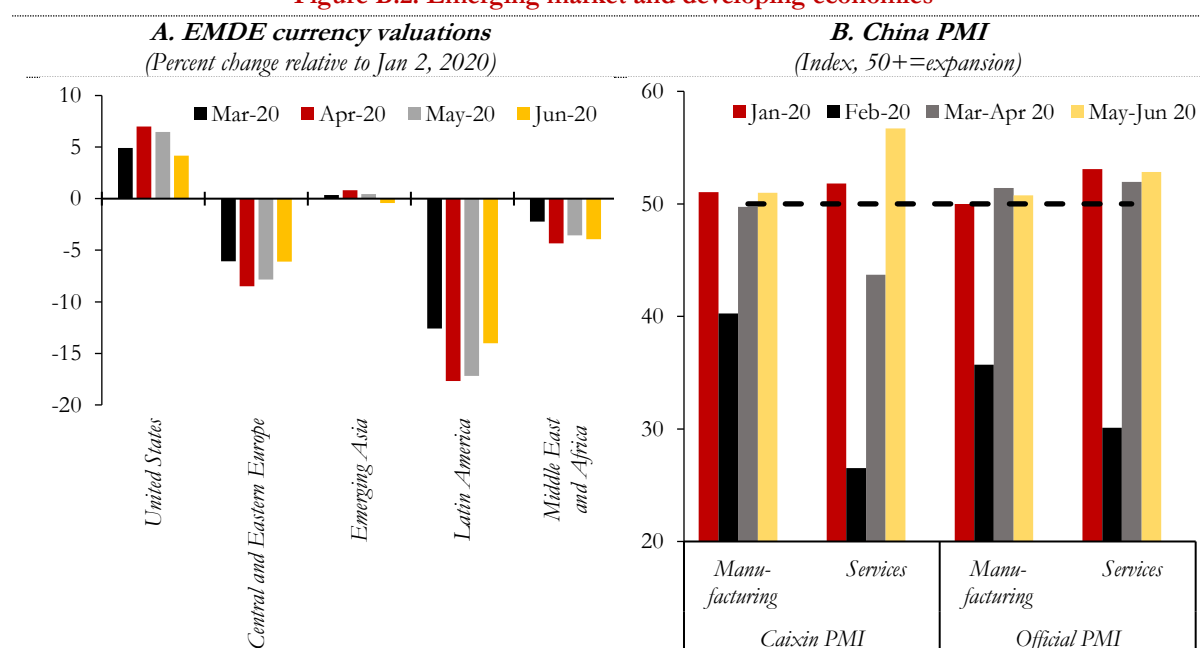
c. Growth outlook in EMDEs

The recovery expected in EMDEs in 2020 has been reversed by the pandemic. After falling to a post GFC-crisis low in 2019, EMDEs are forecasted to contract by 2.5 percent in 2020. The fall in activity is broad-based, with the majority of EMDEs expected to fall into recession. The EMDEs most susceptible to global spillovers, such as economies that are heavily dependent on tourism, deeply embedded in global value

chains, or exporters of industrial commodities, are expected to experience deeper impacts. Many EMDEs are also suffering from depreciation pressures, straining their balance sheets, and raising debt financing vulnerabilities (Figure B.2). Activity in EMDEs is expected to recover in 2021, to above 4.5 percent, supported by an expected pickup in China and a recovery of trade flows and investment. Outside China, growth is expected to recover modestly in 2021, partly as commodity exporters will continue to grapple with subdued commodity prices. Moreover, the expected improvement is contingent on improved trade and investment growth and in some EMDEs, private investment will remain weak due to policy uncertainty and long-standing structural bottlenecks. COVID-19 can erode these prospects further, as firms respond to elevated uncertainty by cutting investment and innovation spending.

In China, output contracted sharply in the first quarter. Industrial and services activity and private consumption were especially depressed by mitigation policies, and exports plummeted more than imports as a result of temporary factory closures. Activity has been normalizing since Q2 2020 following the loosening of lockdown measures. The authorities implemented aggressive monetary and fiscal actions, such as substantial liquidity injections by the central bank to support market confidence and relieve banking liquidity constraints. Growth is projected to decelerate sharply in 2020 from 6.1 percent in 2019 to below 2 percent in 2020. Growth is expected to rebound in 2021, reflecting significant base effects and a recovery in global and domestic demand.

Figure B.2: Emerging market and developing economies



Source: Haver Analytics.

A. Figure shows percent change of the J.P. Morgan nominal broad effective exchange rate index for each region relative to Jan 2, 2020. Each column is based on the period average of daily data during that month.

B. Official and Caixin Purchasing Managers Indexes (PMI). PMI readings above 50 indicate expansion in economic activity; readings below 50 indicate contraction.

d. Financial developments

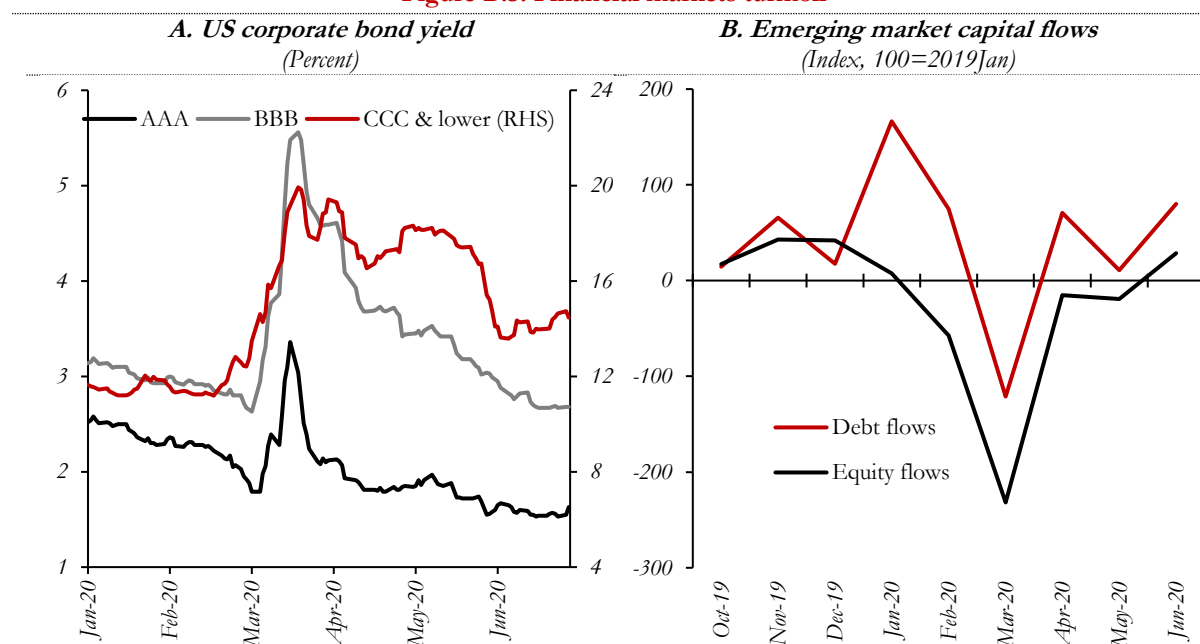
Global financial markets witnessed extremely high volatility in the wake of the COVID-19 outbreak, with repercussions for all regions. Early in the year, the VIX index of market volatility (a common proxy for global market volatility) spiked to levels comparable to those of the 2008-09 GFC. Around the same time, the pressures on many countries' financial systems increased sharply and investors' flight to safety was widespread. Many companies' cash flows and debt financing became highly strained. Liquidity stress

affected various asset classes, including corporate or government debt in major economies like the US (Figure B.3). However, these pressures have receded somewhat since April, partly reflecting strong policy support across major advanced economies.

EMDEs initially experienced capital outflows and equity valuation falls to levels multiple times lower than those near the end of 2019. This brought tightening financing conditions, widening bond spreads, and depreciation pressures, especially in countries with CADs. The fiscal strains from rising financing costs were amplified by high government debt in many EMDEs and banking system profitability came under pressure. Tightening liquidity in many financial markets made it more challenging for large EMDE private and government borrowers to roll over their debts.

To restore investor confidence and contain financial stress, central banks have injected liquidity into financial markets through various means – direct provision of business credit, macroprudential measures, and large-scale asset purchases. Amid the sharp rise in demand for US dollars for hedging and other purposes, the Federal Reserve arranged access to liquidity swaps for many countries, including major economies like Brazil, Mexico, and South Korea. Partly supported by these types of measures, capital outflows from EMDEs as well as equity market valuations stabilized by April.

Figure B.3: Financial markets turmoil



Sources: Federal Reserve Bank of St Louis, Haver Analytics, Institute of International Finance.

A. Last observation is June 30.

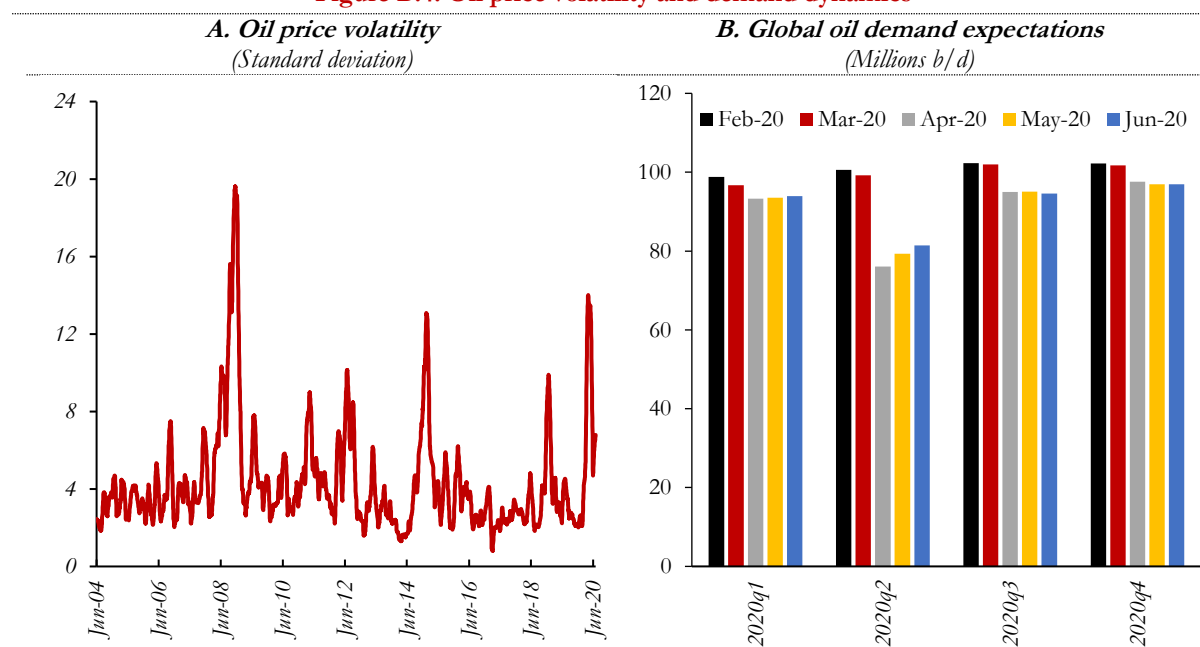
B. Denotes estimated monthly non-resident portfolio debt and equity flows, normalized to 100 in Jan 2020. Last observation is June 2020.

e. Oil market

Driven by a collapse in demand, nearly all commodity prices declined in the first half of the year. Brent oil prices fell by about 30 percent between late January and end-June 2020. Early in the year, the volatility of oil prices reached levels unseen since the GFC (Figure B.4). Mitigation measures to slow the spread of the pandemic have resulted in a sharp decline in travel, which contributes substantially to oil consumption and demand. To help mitigate the impacts associated with the fall in global demand, a new production cut agreement was negotiated by OPEC and its partners in April.

On balance, oil prices are expected to be subdued, around USD 30/bbl on average in 2020. Oil demand is expected to fall by about 8 mil b/d in 2020, an unprecedented annual fall (IEA 2020). Production is expected to remain low, in line with the newly renegotiated cut agreement by OPEC+ members. Risks to the outlook are large in both directions and depend on the speed at which mitigation measures are lifted and the pace at which producers cut output.

Figure B.4: Oil price volatility and demand dynamics



Sources: Haver Analytics, International Energy Agency

A. Rolling 60-day standard deviation of Brent oil prices. X-axis label denotes month-year. Last observation is June 30, 2020.

B. Denotes IEA forecasts for global oil demand. X-axis denotes the forecasted quarter of interest. Legend denotes month-year for which forecast is published.

f. Global trade and remittances

Recent indicators suggest that global trade could contract more than it did during the GFC, partly reflecting the damage COVID-19-related disruptions have posed to international travel and global value chains (Figure B.5). Furthermore, severance in access to credit markets, which contributed to the contraction in global trade during the GFC and its anaemic recovery, again emerges as a risk under the current environment.

The fall in activity has been concentrated in traditionally stable services sectors. In particular, travel restrictions and concerns about COVID-19 have led to a steep fall in tourism—a sector that typically accounts for nearly one third of global services exports—with sharp declines in many economies with the most severe outbreaks.

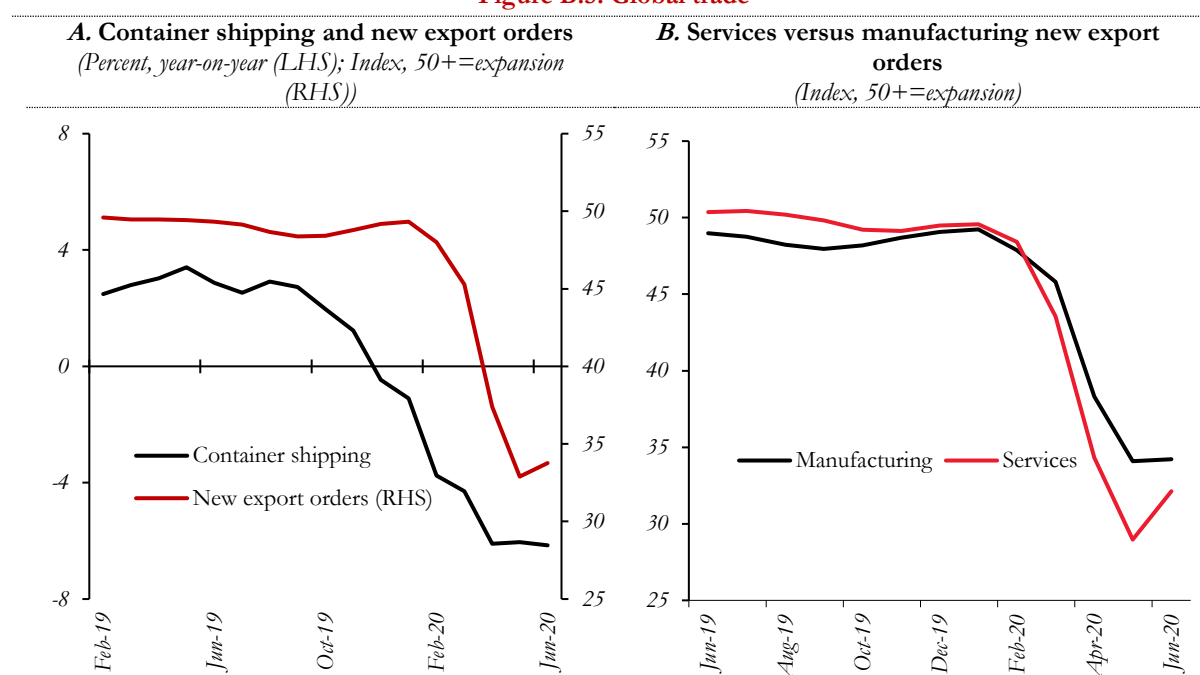
Global value chains had benefitted from a slight easing in tariffs and tensions between the United States and China in February. Since the pandemic spread, however, more stringent border controls and production delays have dented global supply chains, which now account for large share of global trade. Measures to slow the outbreak have limited or delayed the supply of critical inputs and caused shortages of products in sectors like automotive and electronics.

The sharp contraction in global activity in the first half of 2020 is expected to contribute to a contraction of more than 13 percent in global trade, with heavy downside risks. A gradual recovery is expected to start

in the second half of the year as mitigation measures are lifted, travel moves toward more typical levels, and manufacturers rebuild inventories.

Remittance flows are also expected to fall sharply this year, reflecting a decline in the wages of migrant workers and lower migration flows (World Bank 2020b). These declines are expected to be especially pronounced in regions like Europe and Central Asia, South Asia, and Sub-Saharan Africa, which have tight linkages to remittance source countries heavily impacted by COVID-19 disruptions. The fall in commodity prices will also affect commodity exporters, such as those in the Gulf Cooperation Council (GCC), which are important sources of remittances for regions like South Asia.

Figure B.5: Global trade



Sources: Institute of Shipping Economics and Logistics, Haver Analytics.

A. New export orders measured by composite Purchasing Managers' Index (PMI). PMI readings above 50 indicate expansion in economic activity; readings below 50 indicate contraction. Last observation is June 2020. 3-month moving average.

B. Denotes 3 month moving average. Last observation is June 2020.

g. Risks to the global outlook

The global economy is experiencing one of the sharpest contractions in recent history. Given the unprecedented nature of the shock, baseline forecasts are subject to extreme uncertainty and to the possible realization of even worse outcomes.

Downside risks could exacerbate the downturn and/or dampen the pace of recovery. In the near-term, the recession will be more pronounced if a lingering pandemic requires extended mitigation measures, policy actions fail to mitigate the economic damage to households and corporations, financial stress catalyses financial crises, and an extend period of subdued commodity prices triggers deeper financial and real-sector distress among commodity exporters. The recovery could continue to be derailed even after mitigation measures are lifted if the pandemic causes more permanent changes in consumer and investor behaviour, high debt burdens hinder capital investment, crises provoke a retrenchment from global value chains, or social unrest erupts.

Economic growth outlook and risks in India

The COVID-19 pandemic has brought about major disruptions to economic activity, including due to deliberate global and domestic policy actions to contain it. As a result, the Indian economy is now expected to contract in FY20/21. Fiscal outcomes are expected to be stretched in the wake of the COVID-19 outbreak, both due to its revenue implications and the necessary policy responses. The CAD is expected to narrow significantly due to the decline in economic activity and the weak external environment, which are expected to depress both imports and exports.

a. Outlook

India's economy has been significantly affected by the COVID-19 outbreak, including by policy responses that entail upfront economic costs to avoid much larger downstream damage. Until mid-March 2020, India was affected mostly indirectly by the COVID-19 pandemic. External spillover effects dominated, as key imported inputs to domestic production, especially from China,⁶⁰ were impeded and supply chains were disrupted. Thereafter, domestic supply and demand were affected by increasingly stringent restrictions on the movement of goods and people. The Union government implemented a lockdown of the country to contain domestic contagion, and several states imposed additional curfew measures. As a result, economic activity – particularly outside of agriculture – slowed sharply. There was also a large negative impact on financial markets via a shift in the global investor sentiment, which impacted capital flows and equity markets negatively.

Extensions to the national lockdown – implemented by the union government with the backing of states – resulted in a quasi-standstill in economic activity over the first two months of the first quarter of the new fiscal year FY20/21. Moreover, since it is likely that social distancing provisions of varying stringency will need to remain in place even beyond the lockdown period, the recovery is expected to be extremely gradual thereafter. In turn, the lockdown period is likely to adversely impact the balance sheets of households and firms. These mutually reinforcing disruptions in domestic supply and demand, coming on the back of particularly weak external trade activity, are expected to result in a growth contraction in FY20/21, with considerable margins of uncertainty around any point estimate projection. On the supply side, the services sector will be particularly impacted. On the demand side, any revival in domestic investment is likely to be significantly delayed, given enhanced risk aversion by lenders (largely offsetting liquidity measures), renewed concerns about financial sector resilience, and deteriorated corporate and household balance sheets.

Using data available until the end of May the economy is projected to contract by 3.2 percent in FY20/21 (Table B.1)⁶¹. In the current, rapidly evolving context these projections are likely to be revised as new information is incorporated, especially as the daily number of cases continues to increase resulting in several states and districts re-imposing lockdowns; and available high frequency indicators show that the economy has not yet reverted to baseline. In our revised projections, which would be available in October 2020, we would likely project a steeper contraction in the economy. In FY21/22, growth is expected to rebound but very slowly, reflecting the impact of the crisis not only on India's current growth but also on potential output, which is expected to return to trend only over the next several quarters.

With the inflation outlook improving on the back of low oil prices and aggregate demand likely to remain impaired in coming quarters, the RBI may remain accommodative. Several members of the Monetary Policy Committee have indicated the importance of taking into account the deteriorating growth outlook and financial stability considerations, in addition to inflationary dynamics, in the formulation of monetary policy.

⁶⁰ Which accounts for about 15 percent of total imports and supplies key inputs in pharmaceuticals, auto, electronics and apparels sectors.

⁶¹ The latest consensus forecasts are pointing to a contraction of 4.6 percent in FY20/21. This is a downward revision from the average forecast in June 2020 of a contraction 3.4 percent (Consensus Economics, July 13, 2020).

Reflecting subpar economic activity, inflation is expected to fall to an average of about 3.0 percent in FY20/21 before rising gradually in following years.

The current account is expected to be almost balanced at -0.1 percent in FY20/21. Indeed, the decline in economic activity and the weak external environment are expected to continue to depress both imports and exports, with the former having a much greater overall impact on the trade balance. The decline in the CAD, in turn, would ensure that the level of foreign exchange reserves remains comfortable over the medium term, and withstand modest capital outflows.

Significant fiscal implications are expected in the wake of the COVID-19 outbreak. The Union budget FY20/21 envisaged that the fiscal deficit of the central government would narrow to 3.5 percent in FY20/21 and further to 3.3 and 3.1 percent in FY21/22 and FY22/23, respectively. This was to be achieved through increases in tax revenues (reflecting an anticipated recovery in overall growth⁶² and private consumption), and mostly through significant increases in capital receipts, in line with the GoI's ambitious disinvestment program. In the wake of the COVID-19 outbreak, this expected scenario no longer appears possible. The slowdown in growth is now projected to depress revenue collections significantly (relative to the budget targets). Given unprecedented financial market volatility, planned disinvestment is expected to proceed more slowly in the near-term. As a result, the fiscal deficit and debt of the central government are likely to increase sharply over the next two years. In a baseline scenario, which takes into account revised growth projections, lower-than-expected divestment proceeds, and the fiscal measures adopted to date, the fiscal deficit of the central government is projected to increase to 6.6 percent of GDP in FY20/21 and remain at a high 5.5 percent in the following year. Assuming that the combined deficit of the states is contained within a 3.5–4.5 percent of GDP band (which is in line with recent conditional relaxations granted by the central government to the limits of borrowing by states)⁶³ the deficit of the general government may rise to around 11 percent in FY20/21. The deficit and debt numbers may turn out to be even higher in alternative scenarios.

India's debt-to-GDP ratio is projected to increase significantly in the short term, reflecting the expected contraction in GDP growth and a sharp increase in the primary deficit during FY20/21. While there is a significant level of uncertainty around the projections, the general government debt-to-GDP ratio is projected to peak at around 89 percent in FY22/23, before gradually declining thereafter. This notwithstanding, India's public debt is expected to remain sustainable because it is mostly denominated in domestic currency, of long/medium-term maturity, and is predominantly held by residents. India's external debt (both public and private), at around 20 percent of GDP and predominantly of long duration, is also assessed to be sustainable.

b. Risks to the outlook

The forecasts presented in this report utilize information available until the end of May. While significant downside risks stemming from a worse-than-expected global economic downturn remain, the main downside risk is a large scale and persisting domestic COVID-19 contagion scenario along with the re-imposition of restrictions. As noted earlier, several states and districts have begun to reimpose lockdowns as the number of daily cases continues to increase. The significant fiscal and other policy responses announced by the GoI and state governments are expected to provide some relief – mostly to avoid an even deeper contraction – but risks are nonetheless tilted to the downside if (i) lockdown measures continue

⁶²The expected nominal growth rate in the Union Budget was 10 percent for FY20/21.

⁶³ India's states are required to obtain clearance from the GoI for their borrowing plans, and in doing so – broadly speaking – they are required to target fiscal deficits not exceeding 3 percent of state GDP. The 15th Finance Commission is expected to finalize its report and recommendations for the next 5 years, including so called “revenue deficit” grants for those states facing particular and unavoidable fiscal stress.

to be extended and mobility remains significantly constrained over the second quarter of the fiscal year (July-September), (ii) additional strains on the financial sector materialize and/or (iii) the global outlook deteriorates further. Given the very significant uncertainties pertaining to the possible epidemiological developments (in India and in the rest of the world), it is difficult to rule out any of these scenarios and it is difficult to assess the severity of their impacts. Therefore, risks to forecasts are tilted heavily to the downside.

Table B.1: Key Economic Indicators

yoy growth in percent in constant (2011-12 prices), unless otherwise indicated	2017/18	2018/19	2019/20 estimate	2020/21 forecast	2021/22 forecast	2022/23 forecast
GDP, market prices	7.0	6.1	4.2	-3.2	3.1	4.6
Private consumption	7.0	7.2	5.3	-2.8	3.8	4.5
Gross fixed investment	7.2	9.8	-2.8	-8.9	1.4	4.7
Exports, goods and services	4.6	12.3	-3.6	-11.0	5.0	6.5
Imports, goods and services	17.4	8.6	-6.8	-13.5	4.0	5.0
GVA, basic prices	6.6	6.0	3.9	-3.1	3.1	4.6
Agriculture	5.9	2.4	4.0	2.5	2.7	3.5
Industry	6.3	4.9	0.9	-4.0	1.0	3.8
Services	6.9	7.7	5.5	-4.2	4.4	5.3
Consumer price index	3.6	3.4	4.8	3.0	3.0	3.5
Current account balance (percent of GDP)	-1.8	-2.1	-0.9	-0.1	-0.3	-0.3
Fiscal balance (percent of GDP)	-5.8	-5.9	-8.1	-11.1	-9.5	-8.0
General government debt (percent of GDP)	69.5	69.1	72.0	82.7	87.5	89.2

Source: National Statistical Office and World Bank staff calculations.

2. Recent Developments in Trade Policy in India

Global trade is showing continued weakness amid heightened economic policy uncertainty. Direct supply disruptions are likely to affect domestic production and export activities in India and the growth shock in India's major trading partners will also reduce their export demand. India's goods trade growth has already been slowing steadily since 2013, and its growth decelerated further at the end of 2019. Services exports, on the other hand, have maintained a healthy growth rate. The Government of India has introduced several changes to its tariff structure. The changes were in both directions and included increases and reductions, but the net effect was an increase in simple average tariff rates in 2018 and 2019. Simultaneously, other measures have been taken to facilitate trade and liberalize investments. The overall trade policy responses to the COVID-19 crisis have combined four sets of instruments: a) tariffs liberalization; b) export restrictions; c) trade facilitation measures (aiming at supporting export activities and ensuring business continuity); and d) efforts toward regional cooperation.

a. Trade Policy Development Pre-COVID-19⁶⁴

In recent years, the Government of India has introduced several changes to its tariff structure. These included increases and reductions in tariffs, and the net impact was increases ranging, on average, between 24 to 29 percent between 2017 and 2019. The most significant increases were adopted in the context of the FY18/19 Budget, but additional changes occurred in the recently approved FY20/21 Budget. The product coverage affected by the tariff increase is comprehensive, but the most significant increases took place in specific manufacturing categories (Figure B.6 and Figure B.7). For example, customs duties on both mobile phones and mobile phone parts were increased from 15 percent to 20 percent. The FY18/19 budget also doubled the tariff on footwear to 20 percent. Import duties were also doubled to 5 percent for cut and polished diamonds, coloured gemstones, and lab-grown diamonds.

Tariffs on agricultural products were also increased. On February 6, 2018, import duties on sugar were doubled to 100 percent, and the duty on imports of chana was hiked to 40 percent. In June and July of 2018, import tariffs were raised for several agricultural, chemical, textiles, and steel products (see Figure B.7). For example, import tariffs on soya-bean oil were increased to 35 percent. There was also a further rise in import tariffs on certain chickpeas (garbanzos) to 70 percent.

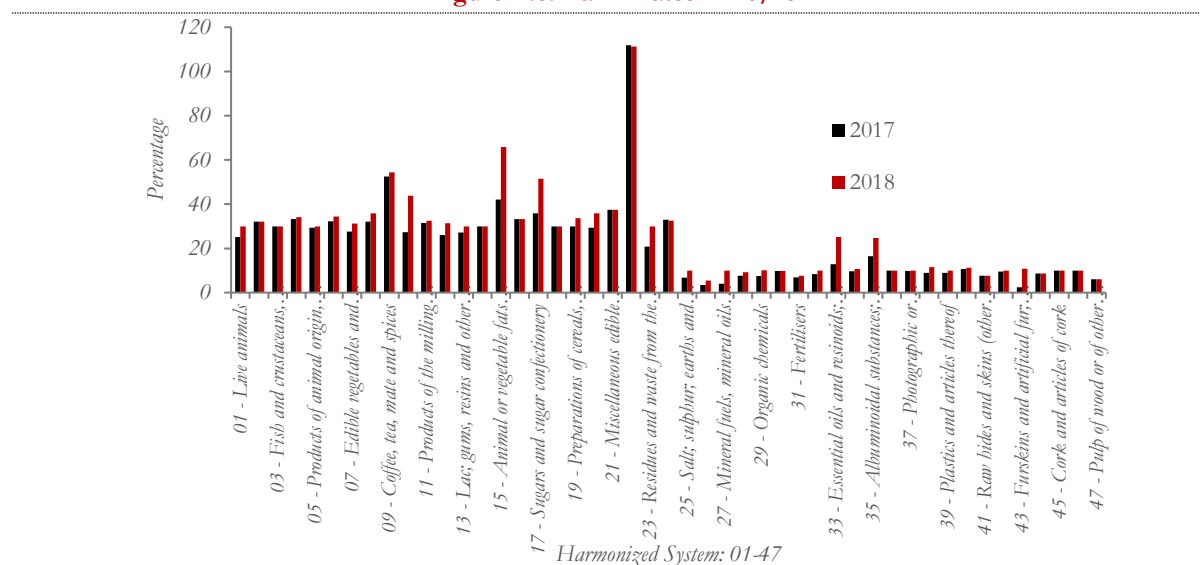
On February 2, 2018, a Social Welfare Surcharge of 10 percent was imposed on imported goods, in place of the education cess. The “social welfare surcharge” is applied to the aggregate of duties, taxes, and cesses assessed on imports.⁶⁵ In the Budget 2020, a new “Health Cess” of 5 percent was introduced on imports of specified medical devices.

⁶⁴ Tariff data are from various sources. The World Integrated Trade Solution database is an excellent source of information.

Unfortunately, the tariff data is only available up to 2018. Another source of information is the WTO. The data at the aggregate level is available up to 2018, but at a more disaggregate level, data is available until 2019. However, both sources do not provide similar information. There are discrepancies on simple average tariffs rate which may be due to the conversion of non-ad-valorem rates into ad-valorem equivalents. This note uses the WTO data available at the WTO Data Portal to capture information up to 2019.

⁶⁵ WTO (2018): Overview of Developments in the International Trading Environment Annual Report by The Director-General, WT/TPR/OV/21, 27 November 2018.

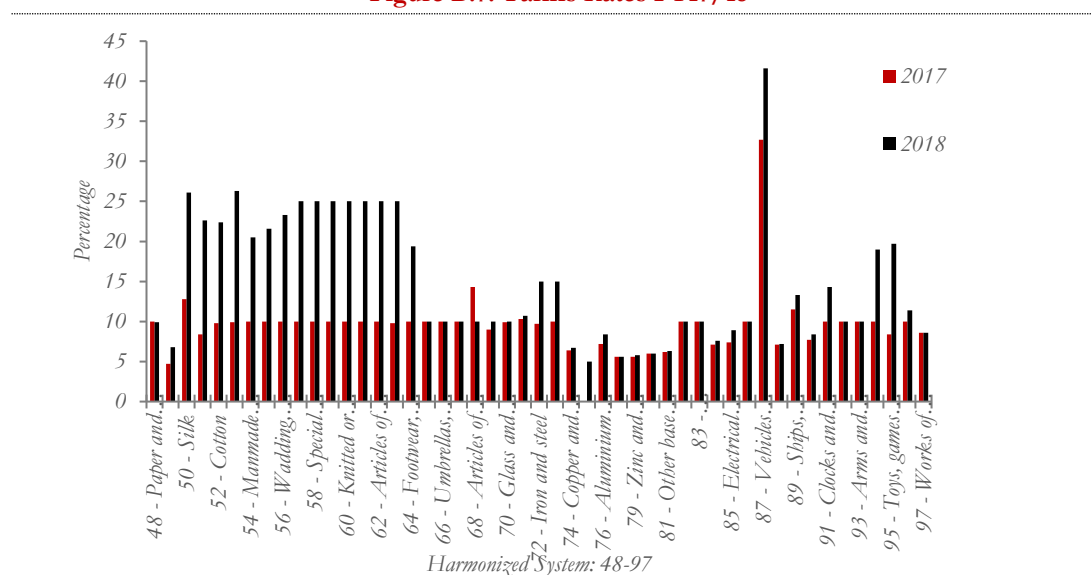
Figure B.6: Tariff Rates FY17/18



Source: WTO Data Portal, <https://timeseries.wto.org/>

During 2019, additional increases in tariffs were introduced in specific sectors. The changes introduced in 2018 and 2019 resulted in an increase of 29 percent on average on tariff rates compared to 2017 (see Figure B.7). Overall, the changes introduced in 2019 had, on average, a marginal impact on the simple mean rate in 2019 compared with 2018.⁶⁶

Figure B.7: Tariffs Rates FY17/18



Source: WTO Data Portal, <https://timeseries.wto.org/>

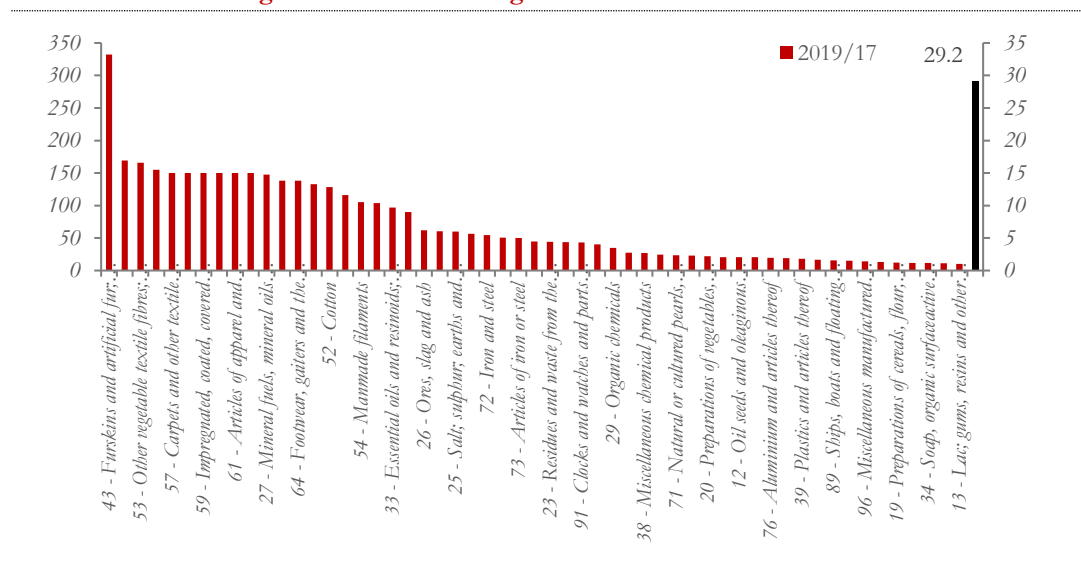
Meanwhile, the Government of India has continued its modernization and simplification of trade procedures at the border. The time and cost to export and import were reduced by implementing electronic sealing of containers, upgrading port infrastructure, and allowing electronic submission of supporting documents with digital signatures.⁶⁷ Additional trade facilitation measures were implemented in

⁶⁶ WTO (2019): Overview of Developments in the International Trading Environment Annual Report by The Director-General, WT/TPR/OV/22, 29 November 2019.

⁶⁷ <https://www.doingbusiness.org/en/data/exploretopics/trading-across-borders/reforms>

2019. India introduced post-clearance audits, integrated stakeholders in a single electronic platform, upgraded port infrastructure, and enhanced the electronic submission of documents.⁶⁸

Figure B.8: Tariffs Changes in Selected Sector: 2017-2019



Source: WTO Data Portal, <https://timeseries.wto.org/>

Notes: Changes in tariffs levels in 2019 compared to 2017;

x-axis: Harmonized Classification; y-Axis Percentage

For clarity, tariffs change below 10 percent were omitted.

Services trade policies were also liberalized. The Union Cabinet approved modifications on FDI in single-brand retailing, allowing up to 100 percent of ownership under the automatic route. Further, for the first five years, a foreign single-brand retailer with more than 51 percent ownership, can gradually satisfy the obligation to source a minimum of 30 percent of the value of purchased goods domestically. After that period, the retailer will be required to meet the 30 percent sourcing norms directly by its Indian operation on an annual basis. More recently, new regulations allow firms to fulfil this requirement by procuring goods produced in India in the Special Economic Zones.⁶⁹ In addition, foreign airlines can invest up to 49 percent in Air India under the approval route, subject to certain conditions. The amendments also clarify that real estate broker services are eligible for 100 percent FDI under the automatic route.⁷⁰ Also in 2019, the establishment of services providers was facilitated by allowing foreign investors in telecommunication, information and broadcasting services, and private security sectors to open branch offices, liaison offices, project offices, or any other place of business; prior approval from the regulator and the ministry concerned is required, whereas RBI approval is no longer required. Some new restrictive regulations have also been introduced that affect e-commerce platforms: companies are not allowed to sell products in which they have equity interests or in which they control the inventory. E-commerce marketplace entities cannot mandate any seller to sell any product exclusively on its platform.⁷¹ Despite the services liberalization measures adopted, India's services trade policies remain comparatively restrictive.⁷²

⁶⁸ <https://www.doingbusiness.org/en/data/exploretopics/trading-across-borders/reforms>

⁶⁹ https://dipp.gov.in/sites/default/files/pn4_2019.pdf and https://dipp.gov.in/sites/default/files/Clarification_on_SBRT_26022020.PDF

⁷⁰ WTO (2018): Overview of Developments in the International Trading Environment Annual Report by The Director-General, WT/TPR/OV/21, 27 November 2018 and

⁷¹ WTO (2019): Overview of Developments in the International Trading Environment Annual Report by The Director-General, WT/TPR/OV/22, 29 November 2019.

⁷² OECD (2019) <http://www.oecd.org/trade/topics/services-trade/documents/oecd-stri-country-note-india.pdf>

The 2020 Budget presented on February 1 included new increases in tariff rates. For example, tariffs on household products and appliances were increased from 10 to 20 percent. Tariffs on some automobiles and automobiles parts were raised from 10 to 15 percent, while some furniture items such as seats, mattress supports, bedding and lamps, and lighting fittings had their duties increased from 20 to 25 percent. Finally, tricycles, scooters, pedal cars, and similar wheeled toys saw an increase from 20 to 60 percent. In addition, the Budget reviewed several trade rules; in particular, rules on anticircumvention for anti-dumping duties and countervailing measures, as well as a revision of the safeguard provisions, which will strengthen the application of trade remedies. A review of rules of origin in the context of trade agreements will also be conducted. The objective of this review is to ensure that free trade agreements are aligned with the government policy directions.⁷³

b. The impact COVID-19 on trade

The impact on Global Trade

Global trade growth was already low, at only 0.9 percent during 2019⁷⁴, due to trade tensions. The COVID-19 shock will further pull down trade growth by more than 13 percent in 2020.⁷⁵ The current crisis differs from the GFC in that it is characterized by simultaneous demand and supply-side shocks.⁷⁶ Initially, supply chains were severely disrupted due to the containment measures imposed in China and trade flows related to these supply chains were negatively affected (impacting production across major economies). Eventually, with the implementation of lockdowns across countries, the crisis spread to the rest of the economy, mainly services activities such as retail, entertainment, domestic transport and logistics, and social services. The impact of the crisis on employment and production will generate domestic demand and import shocks.

The policy responses adopted in industrialized countries will, in turn, have a negative repercussion in China and other East Asian Economies, feeding back into value chains, trade, and GDP growth.⁷⁷ Global GDP growth will experience a severe 5.2 percent decline in 2020.⁷⁸ In addition, services trade is expected to be severely affected by the crisis. On top of the disruption to international transport services due to the fall in merchandise trade, travel restrictions had a significant impact on both passenger transport and tourism services. International tourism is expected to decline by 45–70 percent.⁷⁹

Impact on India's trade

The direct supply disruptions affected, at least temporarily, domestic production and export activities in India. About 7.2 percent of Indian manufacturing valued-added depends on direct and indirect inputs from China.⁸⁰ For example, in the case of the pharmaceutical industry, where about 70 percent of inputs are sourced from China, in the initial stages of the pandemic, temporary concerns emerged due to production/export disruption from China, which translated in a decline of 23 percent in Indian exports in March. Normalization of supply from China started in late March and converted the April decline

⁷³ Budget Speech, <https://www.indiabudget.gov.in/budgetspeech.php>

⁷⁴ Compared to 3.8 percent in the previous year

⁷⁵ World Bank. 2020. Global Economic Prospects, June 2020. Washington, DC: World Bank. WTO (2020a) estimates a trade decline of 13-32 percent in 2020.

⁷⁶ Baldwin (2020) <https://voxeu.org/article/greater-trade-collapse-2020>

⁷⁷ Baldwin and Freeman (2020) <https://voxeu.org/article/covid-concussion-and-supply-chain-contagion-waves>

⁷⁸ World Bank. 2020. Global Economic Prospects, June 2020. Washington, DC: World Bank.

⁷⁹ OECD (2020).

⁸⁰ Baldwin and Freeman (2020) <https://voxeu.org/article/covid-concussion-and-supply-chain-contagion-waves>

into a positive growth in exports of 0.25 percent.⁸¹ The global demand shock is expected to impact trade and India's major trading partners are likely to reduce their export demand due to weak economic growth. For example, the U.S. economy, which represents 16 percent of total merchandise exports, is expected to decline by 6.1 percent, and China, which represents 5 percent of total exports, is expected to grow 1.0 percent. The Euro Area, with a share of 13 percent of total Indian exports, is projected to fall to 9.1 percent.⁸²

Indian merchandise exports declined 60.3 percent in April 2020 (yoy), to USD 10.4 billion, while imports fell 58.6 percent to USD 17.1 billion.⁸³ The cumulative decline of total exports and imports was 23.8 and 22.2 percent, respectively, for January–April 2020. The fall in exports and imports was widespread, except for exports of iron ore, which registered a growth of 17.5 percent, and drugs and pharmaceutical exports, which registered an increase of 0.25 percent. In the case of services, the latest available data show a growth of 1.2 percent in total exports in March 2020, much lower than the growth experienced in prior months. Service Imports experienced a decline of 2.2 percent. The Government of India expects that export of services in April 2020 will reach USD 17.6 billion, a fall of 2.6 percent, while import of services are expected to fall 6.3 percent to USD 10.6 billion.⁸⁴ In other words, services trade remained, at least in the initial stages of the pandemic, resilient to the shocks, with exports and imports growing in April 2020–January 2020, 6.3 and 6.1 percent, respectively, compared to same period of 2019.

Table B.2: Average Applied MFN Tariff (%) for Medical Products, 2019.

	All products	Medicines	Medical Supplies	Medical equipment	Personal protective products
ALL WTO Members	4.8	2.1	6.2	3.5	11.5
Brazil	9.8	7.8	11	8.4	16.6
China	4.5	2.1	7.4	2.5	7.2
India (1)	11.6	10.0	15.0	9.0	12.0
Indonesia	5.2	3.8	5.5	4.5	10.5
Malaysia	11.7	0	32	0.3	6
Mexico	4.6	5.5	5.1	2.3	8.1
Pakistan	10	10.9	13.4	3.6	13.1
Russian Federation	3.2	2.3	4.8	1.8	4.7
Sri Lanka	11	0	25.6	0	11.2

Source: WTO, https://www.wto.org/english/stratop_e/covid19_e/covid19_e.htm

Note: (1) does not include other charges, such as the custom health CEES.

c. Global Trade Policy Responses

Trade policy responses to the crisis have not been uniform. Initially, the focus was limited to medical products, and especially products for the prevention, testing/diagnostic, and treatment of the disease. Many developing countries realized that these products were protected by high tariffs and proposed a temporary reduction (Table B.2). Subsequently, some countries, fearing supply shortages and price increases, have adopted restrictions on export of some agricultural products. Trade facilitation measures aiming at expediting access to imported products and ensuring business continuity to support exports, have also been

⁸¹ <https://www.theguardian.com/world/2020/mar/04/india-limits-medicine-exports-coronavirus-paracetamol-antibiotics> and <https://www.thehindubusinessline.com/economy/chinese-firms-resume-export-of-pharma-inputs-to-india/article31166358.ece>

⁸² World Bank. 2020. Global Economic Prospects, June 2020. Washington, DC: World Bank, and World Bank Group calculations.

⁸³ Source: India's Foreign Trade, Press Release, May 15, 2020, Department of Commerce

⁸⁴ India's Foreign Trade, Press Release, May 15, 2020.

part of the policy response. Unfortunately, unlike what occurred during the GFC, there have been few efforts among major economies to design a coordinated response to minimize the negative impacts of the crisis, especially for poor countries.

d. India's Trade Policy Responses

The Indian government's trade policy responses combined four sets of instruments: a) tariffs liberalization; b) export restrictions; c) trade facilitation measures; and d) efforts toward regional cooperation.

a) *Tariffs liberalization measures.* The tariff rates for products and supplies necessary to address the COVID-19 crisis are relatively high in India, more than double the average of WTO members (see Table B.2). Temporary liberalization measures were adopted for specific items (see Annex). On March 3, the government introduced a temporary elimination of import tariffs on certain organic chemicals and pharmaceutical products; later, on April 1, it decreased import tariffs from 10 to 5 percent for medical and surgical instruments and apparatus. In addition, these products were exempted from the "custom health cess."

b) *Temporary export restrictions.* Several export restrictions were put in place from the end of January 2020. On January 31, 2020, the export of all varieties of personal protection equipment (PPE), including clothing and masks, was prohibited. On February 8, 2020, this prohibition was amended to exclude surgical masks/disposable masks and all gloves. However, the export of all other PPE, including N-95 and other PPE accompanying masks and gloves not specified in the exceptions, remain prohibited. On May 16, new amendments on exports prohibition of mask were introduced allowing exports on non-medical/non-surgical masks of all types. On March 3, 2020, India adopted export restrictions for 26 active pharmaceutical ingredients (APIs) and their derived products. The export restrictions included: paracetamol, antibiotics such as tinidazole and erythromycin, the hormone progesterone, and vitamins B12, B1, and B6. These provisions were subsequently amended on April 4, 2020, allowing exports of some these products, while restrictions on the export policy for formulation made from paracetamol were changed from restricted to free; however, paracetamol APIs remained restricted for export (April 17, 2020). These drugs accounted for 10 percent of all India's pharmaceutical exports.⁸⁵ On March 19, 2020, the export of all ventilators, surgical/disposable (2/3Ply) masks only, and textile raw material for masks and coveralls were prohibited. Further, on March 25, Hydroxychloroquine and formulations were added to the list of banned pharmaceutical exports. Finally, on April 4, the export of diagnostic kits was restricted.

c) *Trade facilitation measures.* To address the crisis, the GoI adopted a number of important decisions to facilitate trade and ensure business continuity.⁸⁶ The Central Board of Indirect Taxes and Customs (CBIC), in coordination with other agencies, declared that customs operations are an essential service during the lockdown period. A 24/7 custom clearance facility was implemented to avoid supply chain disruptions. The CBIC website designed a COVID-19 helpdesk to facilitate quick resolution of problems faced by traders.

Customs offices have been assigned contingency funds to protect the health and safety of frontline officers, and the use of I.T. solutions has been maximized to contribute to social distancing. Waivers of fees, including condonation for delays in filing import declarations, have been introduced. Shipping lines have been instructed to not levy detention charges on containers held up for reasons attributable to lockdown measures. All major ports have been directed not to levy penalties, demurrage, charges, fee, or rental on any port user for any delay in berthing, loading/unloading operations, or evacuation/arrival of cargo caused by reasons attributable to lockdown measures. Airports have also been

⁸⁵ <https://www.theguardian.com/world/2020/mar/04/india-limits-medicine-exports-coronavirus-paracetamol-antibiotics>

⁸⁶ WCO, <http://www.wcoomd.org/en/topics/facilitation/activities-and-programmes/natural-disaster/coronavirus.aspx>

directed to waive similar charges. Importers are being advised to file advance import declaration for speedy customs clearance, pay duties and collect cleared goods without delay, and avoid clogging the customs area. Finally, requests and documents from importers/exporters are being accepted via email to avoid physical visits and contact between the trade and customs officers. Further, additional formalities have been adjusted to facilitate trade.

d) *Regional cooperation.* The government of India is leading a coordinated response at the regional level to discuss the impact of travel restrictions and COVID-19 on intra-regional trade, with a particular focus on maintaining essential trade within the SAARC region. The discussions among SAARC members included an analysis of possible trade facilitation measures such as provisional clearance of imports at preferential duty with suitable conditions, provisional acceptance of digitally signed certificates of origin, acceptance of scanned copies of documents for clearance of imports by customs and release of payments by banks, and addressing challenges at the borders.⁸⁷

The policy responses to a more uncertain global economy should seek to reduce risks and provide stability for investors. The current crisis can open new opportunities for India. One expected effect of the crisis is that multinationals will be seeking greater diversification of their activities away from China. Whether India can seize this opportunity will depend on its capacity to implement economic reforms, where the use of tariffs is not a recommended policy for India to pursue.⁸⁸ On the contrary, trade policy must be, in the words of K. Subramanian, an enabler.⁸⁹

⁸⁷ https://mea.gov.in/press-releases.htm?dtl/32622/Video_Conference_of_senior_trade_officials_of_SAARC_countries_on_dealing_with_the_impact_of_Covid19_on_intraregional_trade

⁸⁸ <https://theprint.in/economy/economic-costs-for-india-may-be-huge-if-covid-19-fallout-lasts-6-months-arvind-panagariya/386975/>

⁸⁹ <https://www.businesstoday.in/union-budget-2020/decoding-the-budget/budget-2020-india-goes-protectionist-with-widespread-changes-in-customs-act/story/395280.html>

3. The implications of the COVID-19 pandemic for India's social protection system

Given the high rates of labour market informality and vulnerability in India, investments in a strong social protection system are key to ensure that the country can recover rapidly from the devastating economic impacts of the COVID-19 pandemic. These investments are not only important for the current crisis, but for India's future as well – which will face other shocks triggered by disasters, structural changes in the labour market, or macroeconomic shifts. The Government's PMGKY and PMGRA are important steps in building such a system. We identify three areas for strategic reforms –(i) creating protocols which empower states to provide cash-based assistance in the context of disasters and financing their social protection needs (ii) scaling up portable cash and insurance support for the urban poor, and (iii) fostering deeper accountability and institutional convergence for social protection. These reforms can help India pivot its social protection system to address the needs of a more urban, mobile, and diverse population.

a. What kind of a social protection system does India need in 2020?⁹⁰

Social protection programs help people become resilient against the risks they face as they seek to lead productive lives and expand their capabilities⁹¹. This note outlines how India's overall social protection system can be strengthened in the context of the ongoing COVID-19 crisis. In triggering a social protection response program through the Pradhan Mantri Garib Kalyan Yojana (PMGKY) and Pradhan Mantri Garib-Kalyan Rojgar Yojana (PMGRY), India has relied on public works and in-kind and cash transfers through its various pre-existing schemes and platforms. In doing so, the country is leveraging different mechanisms of service delivery, including piggybacking on state government systems in the context of federal India, large rural safety nets, food distribution outlets, community organizations and self-help groups, and DBTs into bank accounts. The national government has also taken an important step to make the PDS portable and near-universal during this time of crisis.

India's existing social protection measures provide an important foundation to build a modern social protection system. Future growth and resilience depend on how the social protection system tackles disasters, decentralized governance, a flexible gig economy, and demographic changes. At this stage of development, where nearly half of India is precariously close to the poverty line and given the devastating impacts of COVID-19, India needs an overarching strategy to guide how various innovations, schemes, staff, and budgets will coordinate to ensure adequate social protection coverage for the poor and vulnerable. Meeting the diverse needs of states requires an overhaul in India's social protection financing, disaster management protocols, and delivery architecture. This is critical to ensure that the centre and states consolidate delivery costs, avoid administrative duplication, and respond to India's diverse and changing risk profile. This note takes stock of the current landscape and suggests key reforms to modernize and strengthen India's social protection system at the national and state levels.

b. India's social protection architecture: from poverty to vulnerability

Typically, a comprehensive social protection system requires three types of risk management instruments to work together. First, a steady, safe, and well-paid job is the best insurance during challenging times. Promotional instruments invest in the ability of families to survive shocks on their own

⁹⁰ The piece was authored by Qaiser Khan, Shrayana Bhattacharya, and Ambrish Shahi, drawing on the World Bank's Schemes to Systems Publication from 2019.

⁹¹ This section is based heavily on Bhattacharya, Shrayana, John Blomquist and Rinku Murgai "Poverty to Vulnerability: Rebalancing Social Protection in India" published in *Schemes to Systems* World Bank, 2020. It also draws from Program Document for *Accelerating India's COVID Response Social Protection*, Report No: 147337-IN

—by enhancing productivity, access to job opportunities and incomes through human capital infrastructure, wage legislation, labour policies, skills training, and livelihood interventions. Second, preventive instruments aim to reduce the impacts of shocks before they occur by enabling households to use their savings from good times to tackle losses in tough times. This is mainly done through social insurance programs. For example, health insurance can reduce financial losses faced by families during health crises. Third, protective instruments mitigate the impacts of shocks after they have occurred through tax-financed redistribution from the non-poor to the poor. These programs would classically be called anti-poverty measures as they target social assistance or safety net programs to the poor or destitute, whether in kind or cash. For example, households can seek wages and work from the Mahatma Gandhi National Rural Employment Guarantee scheme (MGNREGS) in times of crises. Countries differ in how much they spend on these three types of instruments within their social protection system. Often, the mix of programs used by a country reflects the nature of risks and shocks faced by its society.

When social protection schemes and welfare architecture were created in India after independence, most of the country was reeling from a period of famine, de-industrialization, and multiple deprivations. Half the population was chronically poor, the country had an aggregate food deficit, financial and banking networks were under-developed, growth rates were weak, and technology available for program administration was rudimentary. But that India no longer exists, and the country's social protection system needs to evolve and catch up with the needs of its new demography and risk profile.

As the share of households below the poverty line has fallen (sharply) to 22 percent, the majority of India is no longer poor. Instead, half of India is vulnerable – these are households that have recently escaped poverty with consumption levels that are precariously close to the poverty line and remain vulnerable to the risk of slipping back. Programs must ensure that those who have escaped poverty are able to sustain improvements. This involves expanding the focus of programs from the chronically poor to families that are vulnerable to falling into poverty.

c. As poverty becomes spatially clustered and urban vulnerabilities rise, India needs to rebalance its mix of protective and preventive instruments for social protection

The diversity across states (i.e., Bihar will need a different social protection approach than Delhi) requires an enabling policy and financing regime, whereby state governments have greater flexibility in shaping context-specific social protection responses, while the national government focuses on monitoring and coordinating interventions and facilitating cross-state learning. Even prior to COVID-19, India needed to forge a new relationship between the national government and states for effective social protection financing and delivery. Despite a decline in poverty levels, India shelters pockets of deep poverty and these households are geographically clustered. Programs to protect the poor against further destitution remain critical in low-income states—Chhattisgarh, Madhya Pradesh (MP), Uttar Pradesh (UP), Odisha, Jharkhand, Rajasthan and Bihar, which account for 45 percent of India's population but nearly 62 percent of its poor. These states continue to need strong safety nets programs to protect them. Finally, inequality across locations and demographic groups has increased. The poverty rate of six of the poorest states in the country is twice that of other states. Within states, poverty and vulnerability remain highest amongst Adivasis⁹², and women are largely missing from the workforce and face serious risks to their mobility and well-being.

⁹² Collective term used to describe tribes in India.

d. High-growth and urbanized states need portable insurance and urban safety nets

While India's range of protective programs is impressive for a developing country, the current social protection architecture, in spending and priorities, remains strongly focused on chronic poverty alleviation. For example, in 2016, while traditional safety nets such as the Public Distribution Scheme received nearly USD 7 billions in budget allocations, the life and accident insurance programs combined spent less than USD 1 million. Programs such as the PDS and MGNREGS constitute 70 percent of social protection spending in the country. In states which have seen growth and rapid urbanization, social protection programs can no longer be singularly focused on chronically poor households.

It is critical that programs help those vulnerable to poverty to anticipate and manage risks and shocks better, and not only attempt to provide aid to relieve the deprivations experienced by the poor. There are three types of tools needed by India's new vulnerable class to prevent them from falling back into poverty and debt traps—health insurance, social insurance (in case of death, accident, and other calamities), and pensions. At present, only 4 percent of households in India use government social insurance programs. Use of private sources of insurance is higher, particularly for wealthy households. IHDS 2012 data shows that 27 percent of households report members using or benefitting from private insurance—unsurprisingly, the bottom 20 percent report very low uptake of private options (5 percent) compared to the top 20 percent (55 percent). The majority of Indian households—poor and non-poor—rely on personal savings to deal with health, accidents, or climate shocks. Micro surveys and administrative data also highlight major gaps in pension and health insurance coverage.

Past policies and recent budgets have taken steps in the right direction. The boost in crop insurance, social pensions for the elderly, the rise in contributory pensions for those who have the wherewithal to save, and larger coverage of health insurance programs will help India re-balance its social protection architecture to match the needs of the rising numbers of its vulnerable people.

e. Decentralizing Social Protection Expenditures

The need to re-balance the mix of programs between protection and prevention does not warrant a dramatic pan-national drop in expenditures on safety nets for the poor. Given the huge diversity in the economic profile of India's states, a variety of approaches is required. For instance, the needs of the rising middle-class with access to private insurance markets in Delhi and Maharashtra will differ markedly from the needs of poorer states such as Uttar Pradesh and Bihar. In states where many poor and vulnerable households are still not able to save enough to insure themselves against crises or inflation, social assistance will remain a core intervention. In low-income states, traditional anti-poverty programs such as PDS or MGNREGS, if implemented well, can serve the twin goals of protection and prevention—by ensuring that India's vulnerable do not become poor and that the poor live with dignity during times of drought or food price inflation. Effective safety nets can dramatically reduce the number of poor and the likelihood that poverty will be transmitted from one generation to the next. Strengthening their delivery systems is key, while allowing state governments to choose the optimal mix of preventive and protective programs to suit their state's needs within an umbrella social protection budget.

The present system of providing social assistance relies on numerous schemes operating at the state and national level with limited coordination. As per the DBT Mission database, India manages more than 400 benefit transfer programs at the central level and about 2500 programs at the state level. This results in cumbersome application processes for citizens, administrative duplication, and expenditure inefficiencies. India can streamline its myriad CSS and Central Sector (CS) social protection schemes into an umbrella social protection budget. For example, India can aim for an "X +block" strategy. This could involve a certain number (say X number) of pan-national portable core CSS or "pillars", combined with a

block grant from which states could finance other safety nets or social security programs best tailored to their own contexts. The grant size can be linked to performance, disaster-risk profiles, agro-climatic needs, or poverty and vulnerability rates in each state. Programs such as MGNREGS, NSAP, PDS, PMJJBY (Pradhan Mantri Jeevan Jyoti Bima Yojana), Pradhan Mantri Swachh Bharat Mission (PMSBM) and Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (AB-PMJAY⁹³) could serve as the “pillars” of this system. The final number and scope of national pillars could be selected based on consultations with states and ministries through an inter-state dialogue process.

This social protection architecture need not be a massive fiscal burden, if the design is self-financing by helping to control additional demands on safety nets that might otherwise arise if families are unable to cope with old age or health crises, which can push households into poverty and debt traps. Thus, an increased emphasis on interventions that help anticipate risks should be expected, particularly in medium- and high-growth states such as Delhi or Maharashtra.

f. Impact of COVID-19

By January 2020, India was no longer a largely chronically poor country—but despite its progress in reducing poverty it became a more unequal country with pockets of deep poverty and lingering vulnerabilities. The majority of India had seen booming tele-digital and transport connectivity, sharp declines in income poverty, and new neglected sources of risks related to climate, urbanization and migration. Even prior to the COVID-19 outbreak, a broader social protection strategy for a more urban, middle-income, mobile, diverse, and decentralized India was urgently required.

COVID-19 has simply amplified the pre-existing vulnerabilities faced by Indian households

Existing challenges and reforms were brought to the fore by the COVID-19 lockdown. The poverty and equity impact of COVID-19 are anticipated to amplify the old vulnerabilities of Indian households. Between FY11/12 and 2015, poverty declined from 21.6 percent to an estimated 13.4 percent at the international poverty line (2011 PPP US\$1.90 per person per day), continuing the earlier trend of rapid poverty reduction. However, preliminary analysis following the national COVID-19 lockdown suggests that these gains are eroding. A recent telephonic survey across ten states in India found that poor households expected to lose around 60 percent of their average monthly income in April following the national lockdown. The latest Center for Monitoring the Indian Economy (CMIE) survey data for April 2020 finds 45 percent of households report a fall in household income in the post-lockdown period.

India is at risk of losing its hard-won gains against poverty, and pre-existing inequalities will widen

Prior to COVID-19, despite absolute poverty reduction in the past two decades, half of India's population was vulnerable, with consumption levels precariously close to the poverty line. A contraction in high-frequency consumption indicators, such as quarterly sales of two-wheeler vehicles, FMCG, and retail personal credit disbursements, also suggests increased vulnerabilities for poorer households. These households are likely to slip back into poverty due to income and job losses triggered

⁹³ AB-PMJAY covers secondary and tertiary hospital care for the bottom 40 percent of India's population at about 20,000 empanelled public and private hospitals nationwide, up to an annual household limit of INR 5 lakhs. Launched in September 2018, earlier this year it crossed the 1 crore mark of total claims reimbursed. It provides a solid foundation for ensuring financial risk protection against high out-of-pocket medical expenses.

by COVID-19. National Sample Survey Office data suggest that a 30-day period without work, as created by the lockdown, can reduce household consumption expenditures for the poorest quintile by 10 percent. Impacts of the global COVID-19 pandemic will also compound pre-existing concerns that the pace of poverty reduction had been disrupted by implementation challenges of indirect tax reforms, stress in the rural economy, and high youth urban unemployment rates. Social inequalities in poverty, well-being, and access to jobs, particularly for women and tribal communities, are expected to amplify differences in how the evolving economic crisis impacts different social groups.

Labour market informality compromises the ability of households to protect themselves

90 percent of the Indian workforce is informal, without access to significant savings or workplace-based social protection benefits such as paid sick leave or social insurance. The latest Indian Periodic Labour Force Survey (2018-19) finds that only 47.2 percent of urban male workers and about 55 percent of urban female workers were regular wage/salaried employees in the usual status. These proportions are much lower in case of rural workers. Even among workers in formal employment in the non-agricultural sector, about 70 percent did not have written job-contracts and about 52 percent were not eligible for any form of social security benefits. These workers are at risk of (temporarily, depending on the pace of recovery) falling into poverty due to wage and livelihood losses triggered by shrinking economic activity, government-imposed closures, and social-distancing protocols.

Migrants face the deepest risks due to a static social protection system

In India, inter-state migrants are at acute risk of increased poverty and destitution. Seasonal migrants dominate low-paying, hazardous, and informal market jobs, such as construction, in key sectors in urban areas. Estimates from the Economic Survey highlight that the magnitude of inter-state labour migration in India was close to 9 million annually between 2011 and 2016. Media reports and civil society groups are highlighting how migrants relying on ad-hoc construction or service jobs in these states have been displaced due to the lockdown. Following the loss of employment due to COVID-19 lockdowns, such migrant workers are at increased risk of falling into poverty. The lack of portability in social protection benefits across state boundaries exacerbates the risks faced by migrants. With unemployment increasing, and decline in earnings and remittances, inter-state migrant workers will need targeted support.

Social Protection is a critical bridge to carry the vulnerable through the COVID-19 crisis

Following the first phase of the COVID-19 pandemic in India and the globe, social protection has emerged as a critical bridge which can help carry vulnerable households through the current and future crises. As economic impacts of the COVID-19 pandemic sharpen, timely and adequate social protection measures can help cushion shocks and prevent further destitution. Following the COVID-19 pandemic, nearly 126 countries have scaled-up coverage and benefits for social protection programs. Evidence shows that timely delivery of social assistance support can forestall losses and protect the poor. In particular, direct cash transfers to households can serve as an important stimulus for economic stability following COVID-19 outbreak, especially if these are targeted to informal and lower-income households who will face disproportionate troubles. Cash transfers can supplement household coping strategies as income support, help out-of-work workers who fall sick, or help them access essential goods.

g. Moving Forward: A Social Protection System for India's Future

The COVID-19 crisis has highlighted the same issues that the World Bank's long term analytic work has indicated are areas in need of major reform: (i) Moving from a scheme-based fragmented social protection architecture towards an integrated approach, blending multiple instruments to provide a fast and flexible social protection response, and reducing administrative duplication and inefficiencies (ii) Building an adaptive social protection system which can quickly provide support to excluded groups and respond to disasters and the diversity of social protection requirements across states and communities, not only for COVID-19 but also for any future crisis, (iii) Creating a portable social protection platform in India to ensure food, social insurance, and cash support for migrants across state boundaries. The GoI is now attentive to the need for effecting these systemic changes. The World Bank is currently supporting a government program which not only provides emergency support to households to weather the COVID-19 crisis, but also simultaneously paves a path for India's fragmented social protection schemes to become an integrated and adaptive system, which leverages decentralization and community-driven approaches for last-mile delivery, enables portable benefits for migrants, and incentivizes context-specific solutions.

h. The COVID-19 challenge has highlighted both the strengths and weaknesses of India's myriad social protection systems.

The strengths of India's social protection systems lie in the ability to mobilize and deliver food rations at a globally unparalleled scale through the PDS at a time when transport was disrupted. The availability of DBT systems to directly transfer support to households. The self-targeted MGNREG program serves as a core pillar to provide employment to the destitute in rural areas. The principal weaknesses are in identifying beneficiaries for programs and creating robust systems for last-mile benefit delivery. Further, eligibility for benefits is linked to places of normal residence and thus even eligible migrant workers who were stranded at their places of work were not immediately able to access social protection benefits. Therefore, the national initiatives to provide migrants food and cash-support through the PDS and SDRF are watershed moments in India's social protection narrative.

Moving forward, social protection in India is poised for a fundamental transformation

Moving forward, social protection in India is poised for a fundamental transformation from a set of fragmented schemes to an integrated system. Successive state and central governments in India have invested in important building blocks. Budgets have been enhanced, more people are being covered, and a series of new programs have been launched with a focus on rights-based entitlements and technological innovations. The Socio-Economic Census (SEC) in 2011—which collected new census data on asset and socio-demographic information—can make the beneficiary identification process more transparent. Moreover, government-to-person payments have received strong impetus through campaigns to open bank accounts and to transition to digital payments through the DBT initiative. NITI Aayog and the Fourteenth Finance Commission have also enabled a framework for consolidation of schemes and for states to gain greater fiscal autonomy. New portable insurance schemes for health, life, crop failure, and accidents have been announced and given priority. The recent Gram Swaraj initiative aims at converging scheme delivery within select aspirational districts. Following the COVID-19 outbreak, the PMGKY and PMGRY allow for a pan-national and portable social protection system to be built. Three areas of investment will prove to be foundational.

From Jan-Dhan to Jan-Suraksha: Creating an Urban Social Protection Mission

Migrants and the urban poor are at risk of exclusion from receiving adequate social protection through PMGKY and India's overall social protection architecture. This is because none of the six

national social assistance programs being leveraged to provide additional support are portable, as they only provide benefits to state residents. Moreover, the PMGKY package has lower coverage in urban areas. Programs such as PM-KISAN and MGNREGS only operate in rural India. Programs such as Pradhan Mantri Ujjwala Yojana (PMUY), NSAP, and PDS report a larger beneficiary base in rural India. Given that shocks in urban areas are transmitted to rural areas through a drop-in demand and remittances, PMGKY coverage in rural India remains critical. However, the rural–urban gap is a major service constraint the number of COVID-19 in urban districts is disproportionately high.

Informal sector workers, especially in urban areas, do not benefit from many programs even though India’s workforce has grown more informal and urban. Furthermore, many eligible workers do not have the incentive or information to register for important contributory insurance programs offered by the government.

While India has an elaborate set of program databases which enable immediate release of cash-transfers in rural areas due to extensive reach of rural safety nets, parallel platforms in urban areas are missing. Urban platforms which link beneficiary information with bank details are critical to ensure rapid delivery of income support in the case of any future crisis. The building blocks for such a platform already exist through the (i) Department of Financial Services’ ambitious financial inclusion Pradhan Mantri Jan Dhan Yojana (PMJDY) program (ii) the near-universal PDS database which contains poverty status, and (iii) community-based organizations which can be enlisted for citizen interface through the Deendayal Antyodaya Yojana–National Urban Livelihoods Mission (DAY-NULM).

The immediate response to COVID-19 will require direct provision of cash/in-kind transfers and public works through government financing. However, long-run resilience will necessitate a reorientation towards more co-contributory approaches. At this time, the government can consider codifying an Urban Jansuraksha Mission (Social Protection Mission) with detailed implementation frameworks to link PDS or relevant government databases with beneficiary bank account details through community-based outreach with urban livelihoods programs, with emphasis on urban poor and female-headed households⁹⁴. Recently, the national government has announced an important initiative to provide rental and housing support to urban residents. This program can also benefit from such a database for identifying the urban poor and vulnerable. Such an urban social protection initiative could also pursue the design of incentive mechanisms to bolster demand for core social insurance schemes for life (PMJJBY), accidents (Pradhan Mantri Suraksha Bima Yojana, PMSBY), and old-age (Atal Pension Yojana, APY) for all PDS ration card holders. The objective would be to scale-up social insurance coverage and simultaneously create a delivery platform for urban areas, with focus on slums and low-income settlements, which can quickly release income-support to vulnerable groups in urban areas at times of crisis.

To succeed, these initiatives need to be paired with improvements in last mile delivery such as building state and local capability and also incentivizing partners such as banks to open accounts for the poor for DBT transfers, and to market other financial products such as life insurance which are also part of the same package to deepen financial sector access for the poor.

i. One Nation One Ration

The idea of creating a portable and pan-national PDS honours the spirit of the National Food Security Act of India. It will be vital in India’s recovery from the ongoing crisis. The policy decision to create a “One Nation One Ration” system to expedite migrant access to food and adequate social protection relief is ambitious and pioneering. However, these will need to be accompanied by clear rules on how states will compensate each other, if needed, for providing rations to migrants across boundaries.

⁹⁴ Last Mile Delivery Options for COVID-19 Note World Bank SPJ 2020 and DDU-NULM Mission Document

For example, if Delhi provides rations for migrants from Bihar, will Delhi receive an allocation for this from the centre, or will these be made across states? Such a regulatory structure is important to codify with clear business rules.

To implement such a national portable system, the databases in each state will need to “talk” to each other to ensure that ration-benefits provided anywhere can be monitored against state allocations. Migrant labourers who tend to leave families at home should be able to receive part of the benefits at a place of their own choosing while the rest of the benefits are provided where their families live. For the PDS to be portable, migrants should be able to access food supplies through Fair Price Shops across state boundaries. Such reform in the food subsidy system will not only be beneficial to tackle food security concerns from the COVID-19 crisis, but any future shocks as well. Portability within the PDS would require affiliated reforms in procurement of grains and management of food stocks. These shall be enabled by current modes of digitized grain procurement and deliveries, which can allow the national government to track and estimate costs per state. These frameworks are being tested in four states since 2019.

Box B.1: Technology and Accountability Tools have Transformed Targeting and Delivery of Social Protection in India since the early 2000s

Social protection in India has benefitted from several technology innovations and accountability reforms over the past decade. Successive state and central governments in India have invested in the important building blocks of a social protection system.

The biggest challenge impeding the transparency of programs has been the reliance on paper-based registers for payments and targeting, which enabled abuse and discretion in who received benefits from the government. In response, state and national governments have aggressively focused on ensuring inclusion and reduction in leakages through rights-based entitlements, community-based accountability, and technological innovations.

Three reform areas have been key: (i) Making food, public works, and time-bound service delivery rights-based entitlements, which has helped balance power asymmetries between clients and service providers as citizens can complain regarding any abuse or service denial in courts. Further, making core programs near-universal has placed greater citizen pressure on service providers to improve delivery. This has particularly been the case for India's PDS which has witnessed expansion in coverage and simultaneous decline in leakage in low-income states. (ii) SEC in 2011—which collected new census data on asset and socio-demographic information—has made the beneficiary identification process more transparent. Prior to the SEC, India's social protection programs largely used regressively targeted paper-based “Below Poverty Line” cards to identify beneficiaries. The use of these BPL cards has largely been phased out by state and central programs in favour of digitized targeting tools. Nearly six states have developed their own social registries for dynamic targeting of programs. (iii) Moreover, government-to-person payments have received strong impetus through campaigns to open bank accounts and the large-scale transition to digital payments through the Direct Benefit Transfer (DBT) initiative. In 2010, the GoI launched the Unique Identification Number (Aadhaar) and Public Financial Management System (PFMS). The introduction of these platforms enabled India to leapfrog from paper-based identification and payments in schemes to end-to-end digitization.

These reforms have accelerated transparent and direct delivery of cash into bank accounts: In FY 2019-20, India transferred over USD 50 billion through digital payments into Aadhaar authenticated beneficiaries' accounts. The GoI has issued over 1.2 billion Aadhaar numbers and institutionalized digital payments by onboarding over 400 central for digital payments. GoI has mandated the use of SEC 2011 data for improved targeting of beneficiaries in respective programs. This is further complemented by the fact that GoI has provided flexibility to the state governments to include and exclude beneficiaries. India's COVID-19 Social Protection Program (PMGKY) includes programs like the PDS and PMUY which are leveraging the SEC data. GoI, in-line with the Supreme Court judgement on Aadhaar, requires welfare schemes to link Aadhaar numbers from the respective beneficiaries to ensure uniqueness, thereby reducing ghost and duplicate records.

Programs like NSAP, MGNREGS, PMUY, and PDS leverage digitized databases to identify beneficiaries and use Aadhaar numbers and digital payments to seamlessly transfer benefits, attempting to minimize leakages through tech-enabled transparent processes. 70 percent of all food ration delivery is digitized as 85%

of Fair Price Shops currently use Aadhaar-enabled point-of-sale devices for authenticated and automated delivery. Food supply distribution is also digitized and tracked through geo-coding in many states to check against abuse.

j. Even with the best designed measures, implementation and state capability will remain key

Translating the potential of these reforms into impact will require complementary investment programs focused on implementation support to states. As the Box highlights, India has made significant strides in using technology and accountability tools to improve payments and targeting. All programs that are leveraged for PMGKY use digital modes of targeting and delivery. However, there is great heterogeneity in implementation capacities across states in India, and the proposed policy reforms will need to be supported through state-level assistance to implement these ambitious proposals. Development partners and national government agencies will need to ensure states are supported in designing delivery systems for social assistance, identifying excluded groups and reinforcing linkages between community-based organizations and social protection programs.

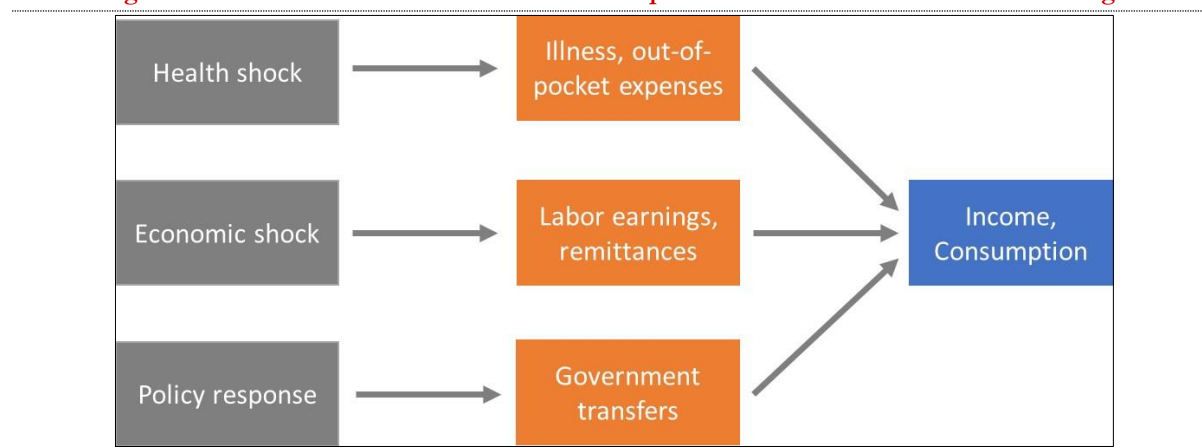
4. The short-term distributional impacts of the COVID-19 pandemic

The COVID-19 crisis threatens to reverse the remarkable gains India has experienced in poverty reduction. The economic and distributional impacts of the crisis are likely to differ depending on the sectors in which households work and the nature of work arrangements. In the absence of high-frequency data on living standards, we conduct micro-simulation analysis to assess the short-term distributional impacts of the COVID-19 crisis. The results of such a simulation exercise can provide useful benchmarks to design specific support policies.

The COVID-19 crisis may lead to a major setback in poverty reduction. In the very short term, lockdowns and quarantines have left many households who live from hand to mouth without any sources of income. Many of them have had no other choice than to return to their villages, and to very basic livelihoods. This setback will represent a major break with the remarkable progress in the reduction of absolute poverty made by India in recent years. Between 2011 and 2015, poverty declined from 21.6 percent to an estimated 13.4 percent at the international poverty line (US\$1.90 per person per day in 2011 Purchasing Power Parity [PPP]). The COVID-19 crisis may reverse these incredible gains in poverty reduction. By one estimate, the number of South Asians living on less than US\$1.90 could increase by 42 million as a consequence of the COVID-19 crisis (Mahler et al. 2020).

Rigorously assessing the poverty impact of the crisis is challenging in India's case due to data constraints. In a country as populous and diverse as India, the effects will differ depending on the sectors in which households work, the formal or informal nature of their work arrangements, and the existing and newly implemented social protection policies. The COVID-19 crisis is expected to have distributional impacts, in addition to poverty impacts. Getting a clear and granular grasp on these changes is important to design appropriate policy responses, given the fiscal and institutional constraints under which government operates. In the absence of reliable high-frequency data on living standards, an assessment based on a microsimulation exercise is proposed here.

The analysis presented here focuses on two of the three main channels through which the COVID-19 crisis can affect Indian households (Figure B.9). The first is the direct health impact: many individuals will get sick and a fraction of them will die. This will undoubtedly entail a huge cost for the affected households, and such cost should be included in a thorough assessment of the costs of the epidemic. However, this impact may not be the largest at the aggregate level. The COVID-19 crisis will result in lower rates of economic growth, hence in fewer employment and earnings opportunities. Given that most household income in India is from work, rather than transfers, these short- and medium-term impacts will necessarily lead to a deterioration in living standards (Chatterjee et al. 2016). Therefore, the main focus of the discussion below is on the economic impacts, and the immediate policy response of the government to mitigate the impacts on the poor.

Figure B.9: The main channels for short-term impacts of COVID-19 on household earnings

Micro-simulations are regularly used by the World Bank to estimate poverty rates in the years for which household expenditure surveys are not available. This is done by applying the estimated growth rate of GDP per capita to the expenditure per capita of households. The growth rate of GDP per capita is obtained from macroeconomic forecasts and the distribution of expenditures per capita comes from the latest available household expenditure survey. Despite their apparent simplicity, micro-simulations yield a rich picture of the short-term distributional impacts of the COVID-19 crisis. Methodologically, micro-simulations involve shifting household expenditure per capita differently depending on household characteristics. Key among them are the main sector of activity and the formal or informal nature of employment, which affect labour earnings.

To assess the expected impact of the COVID-19 crisis, we rely on the change in the growth rate of GDP per capita before the crisis and the expected growth rate after. The COVID-19 impact is defined here as the difference between the GDP growth rate for FY2019/20 obtained from the National Statistical Office and the most recent World Bank forecast for FY2020/21, from May 2020. Different assumptions can be made on how the predicted change in growth will affect households with different characteristics. They range from perfect neutrality to variations that take into account the sector of activity that households are engaged in and their degree of formality. The analysis here implicitly deals with the impact of the crisis on household earnings. The results are based on changes in income at the aggregate level and by sector. But these changes are applied to household consumption based on the sector from which the household derives most of its earnings. There are certain limitations too. The main one is that, while this exercise accounts for existing social protection schemes, it does not account for the announcements made in the wake of the pandemic. It also does not fully account for the large mobility of workers from urban to rural areas. However, the exercise we present here is illustrative, and can be extended suitably to account for these nuances.

More specifically, three scenarios are considered in what follows:

- **Scenario 1 – Aggregate.** The change in household expenditures per capita is the same, in percentage terms, for all households. That change is based on the expected decline in the GDP growth rate between FY2019/20 and FY2020/21.
- **Scenario 2 – Sectoral.** The change in household expenditures per capita varies by sector of activity. The logic is the same as before, except that the expected impact of the crisis on sectoral GDP is different in agriculture, manufacturing, and services. That change is based on the expected decline in the sectoral GDP growth rate between FY2019/20 and FY2020/21.

- Scenario 3 – Institutional. The sectoral impact is the same as in the Scenario 2, but formal households with regular wage earnings are assumed to experience no loss relative to the baseline. The full impact of the crisis in a sector is borne entirely by the informal households engaged in that sector.

Data on household consumption per capita, main sector of activity, and formality comes from the 2011/12 National Sample Survey (NSS) on Consumption Expenditure. Consumption expenditure per capita is adjusted to reflect the current 2019 Rupees. The adjustment combines a change in quantities and a change in prices. The cumulative inflation rate between 2011 and 2019, as measured by the CPI, is used for the change in prices. The change in quantities is based on the growth of real GDP per capita during the same period, corrected by a passthrough factor of 0.70 for all households.

The passthrough factor is the fraction of the growth in GDP per capita from the National Accounts that is passed through to growth in the consumption expenditure per capita in the NSS. This passthrough factor of 0.7 comes from the most recent estimates of the relationship between the growth rates of household expenditure per capita and GDP per capita in India (Newhouse and Vyas 2019). Sensitivity analysis is performed using an earlier estimate of 0.57 passthrough factor (Ravallion 2003). While the magnitude of the impact on consumption expenditures is marginally smaller, the distributional impacts are very similar. Simple, short-run estimates are thus arrived at assuming no change in household behaviour, no direct health impacts, and no mitigation measures. Households may draw upon their savings to cope with a shock to their incomes. But it is equally possible that households may resort to precautionary saving during an economic crisis. The analysis here assumes no change in the savings behavior and, therefore, no change in the marginal propensity to consume.

The definition of formality used for this simulation exercise does not perfectly overlap with more institutional variants of the concept, which emphasize being affiliated with social security or having a written contract. The formal group, as considered here, comprises households whose major source of income is from a regular or salaried job, regardless of whether that job meets the institutional criteria. This definition excludes the self-employed, who would qualify as formal from an institutional point of view such as registered businesses, as they are likely to be affected by the COVID-19 crisis.

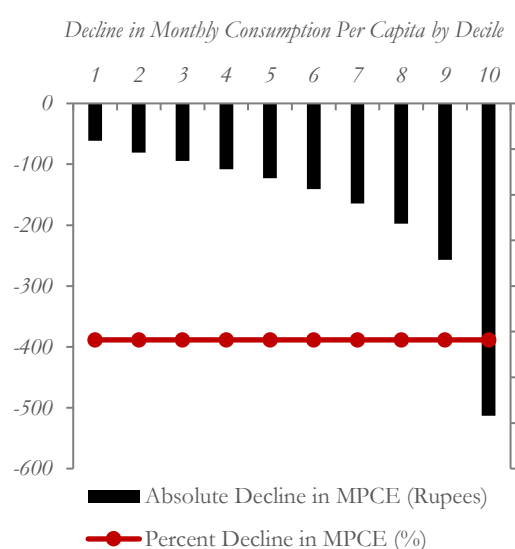
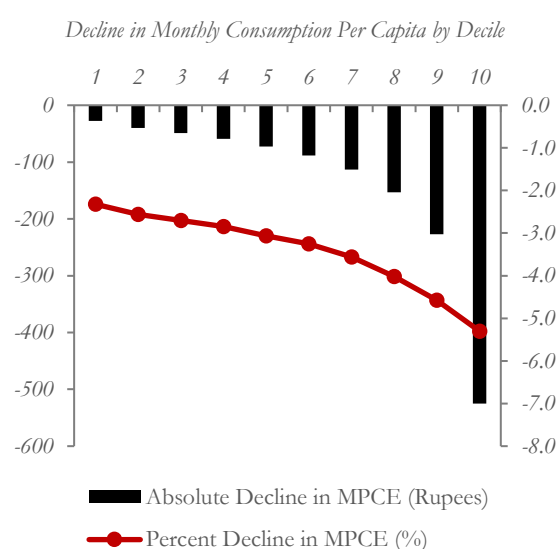
The growth rates used for household expenditure per capita in each of the three scenarios are presented in Table B.3. The first column in this table shows the growth rate of GDP for FY2019/20. The second column shows the forecasted growth rate of GDP for FY2020/21. The third column, the difference between the previous two, is the estimated macroeconomic impact of the COVID-19 crisis. In the fourth column, this macroeconomic impact is adjusted for the passthrough factor to estimate impact at the household level. The fifth column reports the share of household consumption expenditures that are affected by this impact. In scenarios 1 and 2, it is assumed that all households in the group are equally affected, while in scenario 3, the burden of the crisis falls entirely on informal households in each sector. The last column is the ratio of the fourth divided by the fifth. The smaller the informal household's initial share of total household expenditures in a given sector, the larger the impact of the crisis on it.

Table B.3: Impact on household expenditure per capita for different household types

		Expected change in average household earnings (%)				Expected change by type of household (%)		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		2019/20	2020/21f	Expect drop (3)=(2)-(1)	Passthrough adjustment (4)=(3)×0.7	Household consumption affected (share in total)	Formal households	Informal households (7)=(4)/(5)
Scenario 1	Aggregate	4.2	-3.2	7.4	5.2	100	5.2	5.2
	Agriculture	4.0	2.5	1.5	1.1	100	1.1	1.1
Scenario 2	Manufacturing	0.9	-4.0	4.9	3.4	100	3.4	3.4
	Services	5.5	-4.2	9.7	6.8	100	6.8	6.8
Scenario 3	Agriculture	4.0	2.5	1.5	1.1	98	0	1.1
	Manufacturing	0.9	-4.0	4.9	3.4	65	0	5.3
	Services	5.5	-4.2	9.7	6.8	50	0	13.6

Source: Based on consumption expenditure data from the 2011/12 NSS household survey adjusted to the 2019 Rupee, GDP growth estimates from the National Statistical Office, and projections from World Bank staff calculations in May 2020.

At the aggregate level, under the scenario considered, the COVID-19 crisis is expected to result in a 5.2-percent decline in monthly per-capita expenditures (mpce) on average. The simulations show that the impact of the crisis on household expenditure per capita will be similar, in relative terms, across the distribution. As Figure B.10 shows, this is the case with construction in Scenario 1. The deciles are drawn using expenditures per capita at the all-India level. Scenario 2 suggests a progressive impact of the crisis, in the sense that richer households are likely to experience a bigger loss in relative terms (Figure B.11). The expected decline in mpce is 2.3 percent for households in the bottom decile compared to 5.3 percent for those in the top decile. This result is not surprising, as the impact of the crisis on agriculture—where a large share of the poor work—is muted. But Scenario 2 does not take into account that richer households tend to be more formal, hence better protected from an economic shock.

Figure B.10: Impact of the COVID-19 crisis by expenditure decile in Scenario 1 – Aggregate**Figure B.11: Impact of the Covid-19 crisis by expenditure decile in Scenario 2 – Sectoral**

Most formal workers work in manufacturing and services, and so the overall impact of the crisis on the real GDP growth of these two sectors hides very heterogeneous impacts within the sectors. While overall the impact appears distributionally neutral in Scenario 3, this is the result of ignoring the

place of residence. With most formal workers living in urban areas, the impact turns out to be regressive in urban areas. In other words, the expected decline in mpce for the urban poor—who are typically informal—is more than the expected decline for the urban rich in relative terms.

In response to the crisis, the Government of India announced a relief package to provide immediate support to the poor and vulnerable (Box B.2). The package is a combination of direct employment support and in-kind and cash transfers, and relies on existing institutions and safety nets programs for delivery. The extent to which the relief package can help mitigate the adverse impacts of the economic shock will also depend on the effectiveness of its implementation. The direct employment support programs in the relief package target only those living in rural areas, including returning rural migrants.

Figure B.12: Impact of the COVID-19 crisis by expenditure decile in Scenario 3 – Institutional All

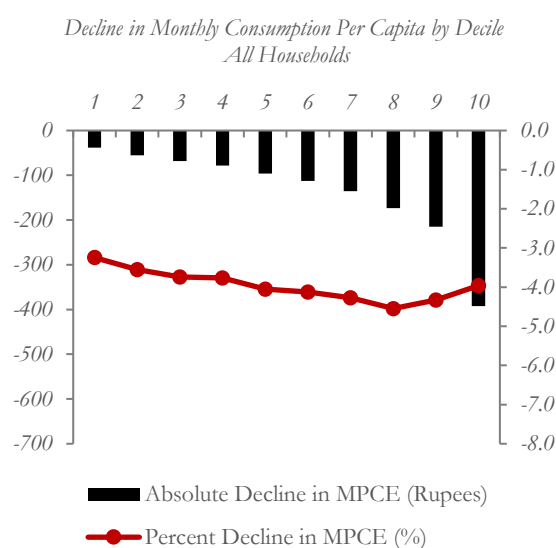
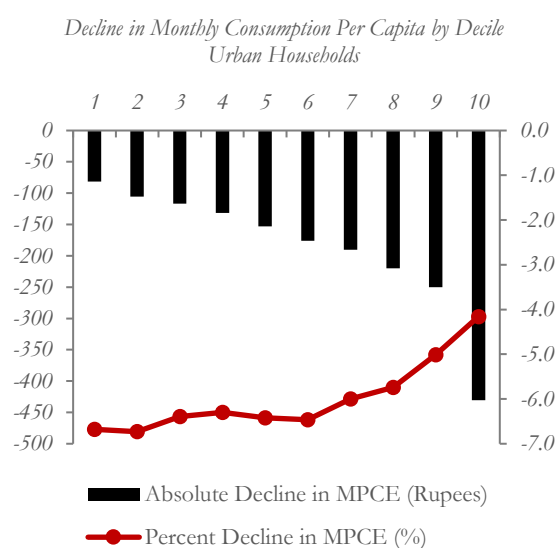


Figure B.13: Impact of the COVID-19 crisis by expenditure decile in Scenario 3 – Institutional Urban



Box B.2: Unpacking the immediate policy response for the poor

On 24th March 2020, the Government of India (GoI) announced a nation-wide lockdown limiting the movement of its 1.3 billion people as a preventive measure aimed at limiting the spread of the COVID-19 virus. Several countries across the globe have implemented similar measures, resulting in disruptions in trade and supply chains. As a result, the livelihood of millions of Indians was impacted.⁹⁵ The GoI announced its first relief package on 26th March 2020 – the Pradhan Mantri Garib Kalyan Yojana (PMGKY) – to provide immediate support to the poor and vulnerable. With a notional cost of INR 1.7 trillion (USD 22.7 billion), the announced package included both in-kind and direct cash transfers. Subsequently, the government extended the duration of some of the schemes included in the PMGKY and has launched a new scheme called the Prime Minister's Garib Kalyan Rojgar Abhiyaan (PMGKRA) to boost livelihood opportunities for returning migrants, resulting in an increase in the overall budget allocated to the relief package to INR 3.3 trillion (USD 44 billion). A brief description of the key schemes included in the relief package, intended benefits, coverage, and notional allocation is presented below.

- *Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY)*: 5kg of free wheat or rice to every individual and 1 kg of pulses to every household, covering 800 million people in April–June 2020. In an announcement made

⁹⁵ Using the international poverty line - \$1.90 per person per day in 2011 Purchasing Power Parity (PPP) terms – nearly 176 million Indians were poor in 2015.

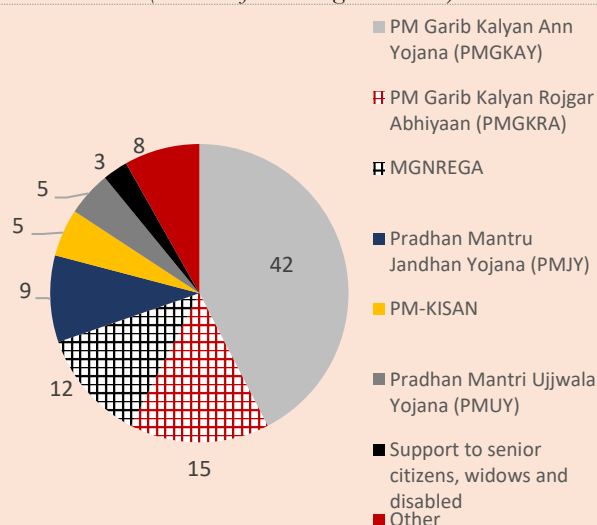
on 30th June 2020, this scheme was extended till November 2020. The total budget allocation for this scheme is INR 1.4 trillion (USD 18.8 billion).

- *Pradhan Mantri Garib Kalyan Rojgar Abhiyaan (PMGKRA)*: 125 days of employment to returning migrants in 116 select districts of six states (Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, and Odisha). The total budget allocated for this scheme is INR 500 billion (USD 6.7 billion).
- *Mahatma Gandhi National Rural Employment Act (MGNREGA)*: Increase in MGNREGA wages from INR 182 per day to Rupees 202 a day to provide additional benefit of INR 2000 to 136 million families. To finance this additional benefit, the government has allocated INR 400 billion (USD 5.4 billion).⁹⁶

- *Pradhan Mantri Jan-Dhan Yojana (PMJDY)*: Three installments of INR 500 each to 204 million women account holders for three months in April–June 2020. Budget allocation of this component is INR 310 billion (USD 4.1 billion).
- *Pradhan Mantri Kisan Samman Nidhi (PM-KSN)*: The release of the first installment of INR 2000 to 87 million farmers in April 2020. Total budget allocation for this component is INR 170 billion (USD 2.3 billion).
- *Pradhan Mantri Ujjwala Yojana (PMUY)*: Three installments of cash transfers amounting to roughly INR 660 each to 80 million existing beneficiaries of the scheme to buy LPG cylinders for three months in April–June 2020. The second installment of the cash transfer will be made conditional on the use of the first installment to buy an LPG cylinder in April. The total budget allocation for this scheme is INR 160 billion (USD 2.1 billion).
- *Support to senior citizens, widows, and the disabled*: Three installments of INR 1000 each for 30 million senior citizens, widows, and disabled persons for three months in April–June 2020. The total budget allocation for this is INR 90 billion (USD 1.2 billion).
- *Other Elements*: Insurance cover of INR 50 lakhs (USD 67 thousand) per health worker fighting COVID-19, relief to 35 million construction workers, support to low wage earners in the organized sector, and an increase in the limit of collateral free lending for Self-Help Groups from INR 10 lakhs to 20 lakhs (USD 27,000) to support roughly 69 million families. The total budget allocation for these components is INR 270 billion (USD 3.6 billion).

Figure B.14: Unpacking the relief package

(% share of total budget allocation)



Source: World Bank staff calculations based on public announcements

⁹⁶ Announcement made 17th May 2020.

5. India's financial sector: the impact of COVID-19 and the long-term policy agenda

Multiple reforms in recent years have improved India's financial sector oversight and financial inclusion, but more needs to be done to cope with the current headwinds and improve the depth and efficiency of financial intermediation. The impact of the COVID-19 pandemic risks exacerbating long-standing structural issues such as slowing credit growth, liquidity shortages in the NBFC sector, and a high level of NPLs. The authorities' anti-crisis response in recent months focused on injecting liquidity into the financial system through policy rate cuts and special liquidity and credit support windows to MSMEs and NBFCs, among others. Borrowers were also provided temporary relief through a loan moratorium and suspension of insolvency procedures, while lenders benefit from regulatory forbearance. While these extraordinary steps help mitigate the immediate crisis impact, preparations should be made to cope with increased NPLs and potential solvency issues for banks and NBFCs after the measures expire.

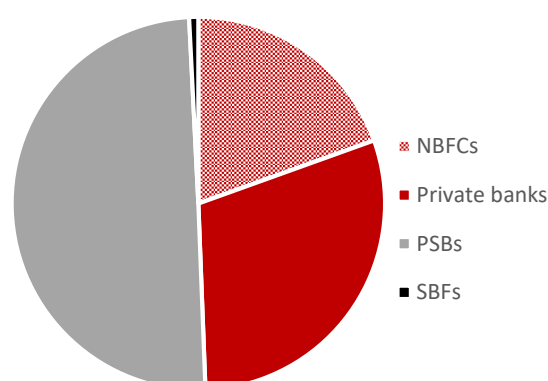
a. Impact of COVID-19 and immediate policy response

The Indian financial sector had been in a tumultuous period since late 2018. Even before the onset of the COVID-19 pandemic, the default of several large NBFCs (such as IL&FS, DHFL, and Altico Capital), the failure of a large cooperative bank (PMC), the resolution of India's fourth largest private bank (Yes Bank), and persistent overhang of legacy NPLs across commercial banks—all in the context of an economic slowdown—had been contributing to slowing credit growth and decreasing market confidence.

Credit growth has slowed down in recent years.

Since 2017, it decelerated sharply from historical averages, mainly due to a slowdown in activity of the PSBs⁹⁷, many of which faced capital shortages and some of which were placed by the RBI under the Prompt Corrective Action (PCA) program, with their lending restricted. Credit growth in the NBFC segment also declined after 2018 due to liquidity issues, leading to a credit crunch for MSMEs and other sectors dependent on NBFC financing. Despite an infusion of liquidity by the RBI, non-food credit growth for banks in FY 2019–20 was only 6.7 percent (compared to 12.3 percent in FY 2018-19), which was a five-decade low. The MFI sector was an exception in 2019-20, with credit growth of 31 percent (down from 38 percent in 2018-19), but also experienced a decrease recently due to liquidity constraints and rising NPLs.

Figure B.15: Share of credit, March 2020



Source: RBI

Notes: Data for NBFCs are for September 2019. SBFs – small finance banks

Bank NPLs remain high despite recent resolution efforts, and NBFC NPLs increased. NPL resolution made significant progress in the banking sector due to the implementation of the new Insolvency and Bankruptcy Code (IBC) and other measures. The gross NPL ratio of scheduled commercial banks declined from 11.6 percent in March 2018 to 8.5 percent in March 2020. Meanwhile, NBFC NPLs have increased from 4.5 percent in 2015-16 to 6.4 percent in March 2020. The NBFC liquidity crisis in the past eighteen months has given rise to a “triple balance sheet” problem, with banks, NBFCs, and the corporate

⁹⁷ Non-food credit growth for banks slowed from a CAGR of 13 percent between 2010-2017 to a CAGR of 8.9 percent between 2017-2020.

sector (especially real estate firms) trapped in a vicious cycle of deteriorating asset quality and liquidity shortages.

The large PSB sector requires significant fiscal outlays and has been outperformed by private banks. The recent clean-up of PSBs has come at a significant cost to the state budget, with US\$38.68 billion spent on recapitalization in the past four years. The cost of funds for private banks has been consistently higher than for PSBs in recent years (e.g., 5.4 percent vis-à-vis 5.0 percent in 2018-19). At the same time, PSBs reported negative RoAs and RoEs from March 2017 to March 2020, as compared to consistently positive RoAs and RoEs for private banks during that period. Private banks also display much lower NPL levels than PSBs⁹⁸. These differences in performance suggest that a large public sector footprint in the banking sector may adversely impact efficient allocation of capital.

The NBFC sector provided an alternate channel of credit for the real sector, especially MSMEs, in recent years but faced funding challenges. The default of several large NBFCs in 2018 led to capital market funding drying up, even for NBFCs which were not in distress. Since NBFCs relied heavily on short-term funding to finance long term assets, the sudden withdrawal of liquidity was especially problematic. Although banks have stepped in to provide funding to NBFCs (in large part responding to incentives from the government and the RBI), it came at a cost to NBFCs, of more onerous funding terms for securitized loans, such as banks' requirements for higher collateralization levels and high quality of securitized assets.

While India's equity market has been growing rapidly, the corporate bond market is underdeveloped and contributes to the lack of diversity in funding sources. The debt market remains highly skewed toward government securities, while the corporate bond market is dominated by top-rated financial and public-sector issuers. Corporate bond issuance amounts to roughly 3.9 percent of GDP, much less than in other emerging markets, and has remained flat over the past three years. The institutional investor base is relatively small, which is partially explained by conservative investment policies adopted by regulators.

b. Impact of COVID-19 and immediate policy response

Since the onset of the COVID-19 crisis in India in March 2020, the authorities have taken a wide range of actions to mitigate the impact on financial institutions and borrowers. To offset the precipitous decline in credit growth due to a confidence shock, the RBI announced (almost immediately) a series of measures, including a large policy rate cut, a reduction in the CRR, increased overnight borrowing limits for banks, and increased borrowing limits for the federal and state governments. RBI has also introduced sector-specific liquidity windows, including TLTROs covering NBFCs, a special liquidity facility for mutual funds (SLF MF), and a refinance window for the all-India DFIs.⁹⁹ Finally, the RBI has announced a six-month loan moratorium and a standstill on loan reclassification till end of August 2020, which will defer the impact of fresh NPLs on capital adequacy and provisioning requirements.

The government announced additional measures to support MSMEs and NBFC liquidity, as part of the economic recovery program announced in May 2020. These measures mostly comprised liquidity facilities from the RBI and lenders, with partial or full guarantee by the government. The

⁹⁸ Between March 2017 and March 2020, PSBs reported RoA of -0.1 to -1.0 percent, and RoE of -1.2 to -14 percent. Private banks reported a RoA of 1.0 to 1.5 percent and a RoE of 9.1 to 14 percent during the same period. PSBs reported NPAs of 11.3 percent as compared to 4.2 percent for private banks in March 2020.

⁹⁹ RBI reduced the policy rate by 115 bps in April–May 2020, reduced the Cash reserve ratio (CRR) by 100 bps, increased the borrowing limits for states by 60 percent and from Rs.1.2 trillion to Rs.2 trillion for the central government. The RBI also implemented the TLTRO of INR 1 trillion followed by the TLTRO 2.0 of INR 250 billion for NBFCs, a refinance facility of INR 500 billion for DFIs (NABARD, SIDBI and NHB) and a refinance facility of INR 500 billion for mutual funds.

government has initiated the implementation of these facilities. Banks and NBFCs have started sanctioning credit to beneficiaries under these facilities, with a few initial roadblocks (low initial disbursement to MSMEs and concerns over end use of additional credit). The liquidity measures announced so far have low immediate fiscal outlays but substantial calls on the guarantees included in these measures could result in additional fiscal costs over the medium term. The government also suspended fresh insolvency proceedings for debtor defaults occurring on or after March 25, 2020, for a period of six months (can be extended up to one year).

The measures by the government and the RBI have mitigated immediate liquidity concerns, but their impact on credit growth remains to be seen. Credit growth remains low at 6.2 percent for the fortnight ended June 19, 2020 compared to 12.3 percent during the same period last year. Commercial banks have lately kept very high liquid balances with the RBI, in the region of Rupees 6-7 trillion (around US\$80-93 billion) which are substantially in excess of the required minimum reserves. This is for two key reasons. Firstly, financial institutions and other creditors have turned highly risk-averse towards funding economic activities given the uncertainty about the current environment. Secondly, the financial sector still has not fully embraced innovations in financial technologies that could accelerate credit and payment delivery to MSMEs.

c. Emerging risks post lockdown

The banking sector is facing increased, long-term asset quality and profitability pressures given the negative economic outlook. A significant spike in NPLs should be expected once regulatory forbearance is phased out in late 2020. Loans to MSMEs, NBFCs, and retail lending, accounting for more than 40 per cent of banks' overall portfolio, are particularly at risk. In the meantime, the recent suspension of insolvency proceedings would limit the lenders' ability to deal with new defaults. Banks' profits are also under pressure due to reduced disbursement of credit, increased delinquencies post lockdown, depressed net interest margins, and a decrease in fee-based income. The strain on all lenders could ultimately be profound, through second-order effects of insolvencies and NPLs in the enterprise sector.

NBFC and MFI balance sheets are stressed on both the liabilities and asset sides. The NBFC sector is facing exacerbated liquidity risks as the volatility in financing from both banks and capital markets has increased since the onset of the COVID-19 pandemic. Debt moratoriums provided by NBFCs to their borrowers may not be uniformly counter-balanced by moratoriums on their own borrowings (banks can provide moratorium to NBFCs on a case by case basis) or direct access to RBI liquidity windows. An attempt to improve NBFC liquidity through TLRTO 2.0, a targeted repo operation to channel liquidity to NBFCs through banks, was only partially successful as banks availed only 25 percent of the total amount¹⁰⁰. While the various liquidity facilities have partially eased funding for NBFCs in the past two months, the spread remains high. On the asset side, the capacity of borrowers (mostly real estate, MSME, retail) to repay after the moratorium is uncertain. Likewise, the expected increase in loan delinquencies and slippages in repayment rate for the MFI sector due to a collapse in clients' revenues could threaten the viability of many institutions.

Small private banks and NBFCs could be more severely impacted than larger banks. The lack of a strong depositor base, exacerbated by the migration of deposits to larger banks post the Yes Bank crisis, could weaken the liquidity position and stability of small private banks. Customer confidence in small private banks has declined and may deteriorate further due to COVID-19, as customers might prefer PSBs with implied sovereign guarantees or larger, more stable private banks. The preference for larger banks is evident from the fact that while deposit growth increased sharply between January and May 2020,

¹⁰⁰ The first tranche of TLRTO 2.0 of INR 250 billion was utilized to the extent of 51 percent. The RBI has yet to implement the second tranche of TLRTO 2.0.

depositors are now focusing on quality and safety to differentiate between banks. Banks with AAA ratings have witnessed an increase in the deposit accretion rate, whereas new-age private banks, regional banks, and small finance banks (SFBs) have mostly seen a slow down.

Banks' and NBFCs' capital adequacy could come under stress as asset quality deteriorates and profitability declines. The CRAR for banks was 14.8 percent as of the end of March 2020, as compared to the regulatory minimum of 10.9 percent. For NBFCs, CRAR stood at 19.6 percent as of the same date, down from 22.1 percent in March 2018 but was still above the regulatory minimum of 15 percent. It should be kept in mind, however, that aggregate capital buffers may mask weaknesses in some financial institutions. While insolvency of an individual bank, NBFC, or MFI is not likely to lead to a systemic crisis, it could still have a lasting impact on market confidence for the entire sector, as seen in the case of large NBFC failures in recent years.

The volatility of investment flows remains a risk for both stock and bond markets. Along with other emerging market economies, India experienced large capital outflows in March 2020 (US\$15.9 billion, the largest among emerging markets in Asia). Mutual funds (MFs), especially debt mutual funds, have been facing redemption pressures which led to a decrease in MFs' assets under management (AUM) and contributed to the closure of Franklin Templeton's six credit funds in April 2020. Mutual funds' AUM decreased by 21.1 percent between January and March 2020. While the capital inflows resumed in recent weeks, the risk of volatility remains high given the uncertain global and domestic economic outlook.

d. Reform agenda going forward

India lags many of its peers on financial development indicators such as financial sector depth and efficiency. While India's savings-to-Gross Domestic Product (GDP) ratio (30 percent) is in line with that of peers (e.g., Malaysia and Brazil), its credit-to-GDP ratio at 51 percent is much lower¹⁰¹. India has a very particular financial sector structure with numerous but overly fragmented institutions which depend heavily on domestic deposits for funding. The public sector footprint in the financial sector is notably higher than in other emerging markets, which results in high fiscal costs, contingent liabilities, and inefficiencies in credit allocation. To support the country's ambitious long-term growth goals, the large financing gaps in infrastructure (US\$1.2 trillion through 2040) as well as in SME and housing finance will need to be closed, requiring stronger capabilities of the financial system.

The recent liquidity and performance issues in the sector, exacerbated by the COVID-19 crisis, present policymakers with a strong reason—and an opportunity—to accelerate efforts towards building a more efficient, stable, and market-oriented financial system. Progress in the following broad reform areas is needed to boost the market confidence and financing of productive firms in the short term (“keep the lights on”), and to deepen and diversify financial intermediation in the longer term.

1) Maintaining financial sector stability is a critical challenge in the light of increased risks. The RBI's continued focus on risk-based regulation and supervision will be important as the temporary forbearance measures are phased out. Further strengthening of financial sector safety nets (inter alia the resolution regime, deposit insurance, coordination between safety net players, and dealing with systemically important institutions) could be considered. Liquidity and capital buffers should be closely monitored and replenished if necessary. The regulatory and institutional framework for debt restructuring and insolvency needs to be ready to deal with the expected spike in NPLs.

2) Reforms in the NBFC sector are needed to support its role in channelling credit to the real sector. The government has recognized the important role of NBFCs in serving the needs of niche

¹⁰¹ Malaysia's and Brazil's are 136 per cent, and 70 per cent, respectively.

geographies and sectors and has recently launched several liquidity schemes for NBFCs as part of the COVID-19 economic recovery program. These temporary measures could be institutionalized through sustainable market instruments like a risk sharing facility, Residential Mortgage Backed Securities (RMBS), and a platform (housing) and credit enhancement company (infrastructure) to diversify the funding base and serve the liquidity needs of NBFCs, including smaller ones¹⁰². It would also be important to continue strengthening the risk-based regulation and oversight of NBFCs, with the focus on systemically important institutions. Further consolidation in the very fragmented sector should be encouraged through changes in NBFC regulations by the RBI. The funding model for small and medium NBFCs, which cannot access capital markets and depend on refinancing and sale of asset portfolios, leads to cherry picking of NBFC assets by banks, and is not a sustainable model.

3) Deeper capital markets are critical for increasing the availability of long-term finance, especially given the asset-liability mismatches in the banking sector. Once market conditions normalize, several measures could be implemented to ease demand-side constraints. Changes in investment policies for institutional investors (inter alia pension funds and insurance companies) could be considered as part of the solution for crowding in long-term finance. The role of DFIs (such as SIDBI) could be reimagined to crowd in market-based funding, and the supply of new infrastructure-finance instruments needs to increase to attract more institutional investors (especially in sectors such as energy generation and renewable energy). Another important measure could be the introduction of a risk-based capital framework for the insurance sector; issuing Environmental, Social, and Governance (ESG) guidelines for issuers and investors. Other recommendations for capital markets and issuers include: establishing a high-level committee on the development of the corporate bond market; regulatory simplifications for corporate issuers; introducing covered bonds for issuing banks/NBFCs; strengthened supervision of credit rating agencies; harmonized tax treatment of bond Exchange Traded Funds (ETFs), debt mutual funds, equity, and equity mutual funds; and actions to improve the yield curve and to include India in global bond indexes.

4) The role of fintech in accelerating financial inclusion in India has been impressive, but the nexus between fintech and MSMEs has yet to be fully exploited. Fintech lenders have lower origination costs and turnaround time than traditional lenders and could help borrowers, especially MSMEs, restart business activities post lockdown. However, fintech lenders will need to improve their presence at ground level to effectively increase collections from smaller borrowers. Co-origination with banks could be a useful mechanism for fintech NBFCs to scale up lending, given the liquidity constraints they face. Further operationalization and improved coordination of various regulatory sandboxes would increase efficiency and innovation among fintech firms.

5) Last but not least, it is encouraging that the government seems to be moving to a more selective and strategic public-sector footprint in the financial sector, as witnessed by the consolidation of PSBs and strengthening their corporate governance and oversight. Gradually scaling back the statutory requirement for state banks to provide liquidity, as well as the priority-sector lending policy, would be helpful to reduce market distortion. In the longer run, when the market conditions improve, a mix of private capital injections into state banks and, in some cases, full privatization could be considered. PSBs would also benefit from a strengthening of their corporate governance frameworks, reduced reliance on government for recapitalization, a more active role of the government as a shareholder, and a more strategic role in the financial sector. As shown by international experience, this could boost the banking sector's ability to support credit, facilitate effective financial intermediation, and reduce moral hazard and fiscal exposure.

¹⁰² The risk-sharing facility will allow NBFCs to diversify funding sources and involve funding, guarantees, etc. for NBFCs to lend to sectors such as MSMEs. The RMBS platform will help HFCs, especially smaller HFCs, to improve liquidity through securitization. The credit enhancement company (CEC) will support de-risking of debt issuances for infrastructure.

6. Electricity consumption and night-time lights: two promising proxies for economic activity in India¹⁰³

The COVID-19 pandemic has disrupted economic activity in India. Traditional measures of economic activity are unable to measure the disruption in real time and instead other proxies are needed. High-frequency indicators like industrial production or the services PMI have gained prominence and new measures, for example related to mobility, are frequently reported. Two new measures are employed to gauge the economic impact of the COVID-19 pandemic and the containment measures. First, daily electricity consumption, which is available in near-real time and strongly related to overall economic activity, is studied to assess the economic activity at high frequency. Second, data on monthly night-time light intensity, which is also related to overall economic activity, is used to analyse economic activity at a high spatial granularity. Electricity consumption was nearly 30 percent below normal levels at the end of March, remained a quarter below normal levels in April, 14 percent below normal in May, and was still 8 percent below normal in June. In April, night-time light intensity declined in more than two thirds of the districts and the average decline was 12 percent. Local infection rates have an impact on night-time light intensity, with more cases resulting in larger declines. This has strong implications for the rebound of the economy. Without effectively reducing the risk of a COVID-19 infection, voluntary reductions of mobility make it unlikely that the economy will return to full potential even when restrictions are relaxed. In the current context, daily electricity data and information on night-time light intensity are helpful to monitor the economic situation, but they may also be able to complement national account estimates more generally.

In India, as in so many other countries, the COVID-19 pandemic has disrupted economic activity.

However, quantifying this disruption is challenging. To monitor economic activity in times like these, needs measures are needed that are available at high frequency, high spatial granularity (i.e. down to the district level), and with only a short publication lag (i.e. nearly in real time). Many indicators that are traditionally used to assess the economic situation are not well suited to quantify the current disruption. For example, national account estimates of economic activity are only available quarterly only at the national level and that too with a substantial lag. State-level estimates are only annual. With states having some discretion in implementing non-pharmaceutical interventions to contain the spread of COVID-19 and the separation of districts in different zones, national accounts data are now even less helpful to examine the economic disruption caused by COVID-19.

Traditional and new high-frequency indicators have hence gained prominence. These include many high-frequency indicators related to financial markets, such as interest rates (and interest rate spreads), and growth in bank credit. In addition, high-frequency data related to both exports and imports are also available. There are also some that measures economic activity more directly, for example the Index of Industrial Production and the different Purchasing Managers Indices. In addition, some new indicators are widely used to assess the current economic situation. GST revenue, for example, is available monthly and allows for insights in formal sector activity.¹⁰⁴ Since the economy is impacted by lockdown measures intended to reduce mobility, data on the latter is used to see how much bite the restrictions still have.

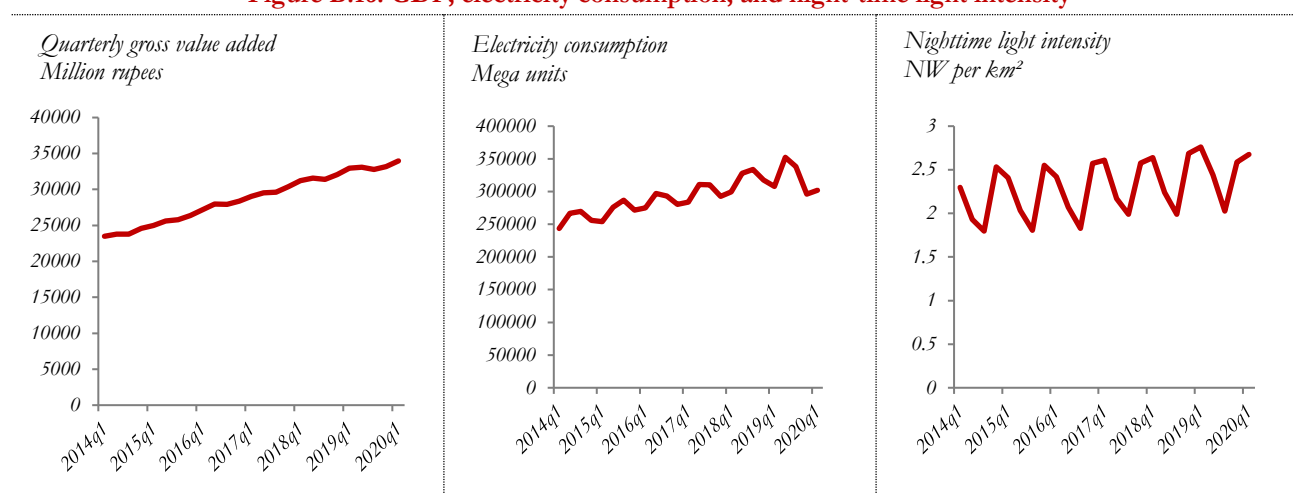
In this short note, two additional proxies of economic activity are discussed that are available at a high frequency, with short publication lags, and at a high spatial granularity: electricity consumption and night-time light intensity. Both have been shown to closely track economic activity around the globe and have hence been used to improve national account estimates of economic activity (e.g. Henderson et al. 2012, Lyu et al. 2018, Chen et al. 2019). Electricity is an input to activities throughout the economy, from industrial production to commerce and household activity, and changes in its

¹⁰³ The authors, Robert Beyer, Sebastian Franco-Bedoya and Virgilio Galdo are from the World Bank's South Asia Region Chief Economist's office.

¹⁰⁴ In the first quarter of FY21, GST revenue was 40 percent below the level in FY20.

consumption thus reveal information about these activities. In the United States, high-frequency data on electricity consumption revealed the economic collapse during the GFC much earlier than national account estimates (Cicala 2020a) and such data has already been employed to assess the economic disruption due to COVID-19 in Europe (Cicala 2020b). Similarly, night-time light intensity contains information about economic activity at high spatial granularity. Night-time light data has been extensively used in a wide array of economic studies ranging from monitoring economic activity (Henderson et al. 2012, Keola et al. 2015, Henderson et al. 2018) to assessing regional economic convergence and identifying urban spaces and markets (Gibson et al. 2017, Baragwanath et al. 2019, Ch et al. 2020) to predicting welfare (Jean et al. 2016), and to assessing the quality of national account statistics (Pinkovskiy et al. 2016, Morris and Zhang 2019). Night-time light data has proven to be a very helpful source of information in India as well. For example, night-time light data has been used to evaluate the economic impact of India's demonetization in November 2016 (Beyer et al. 2018, Chodorow-Reich et al. 2020), to approximate state-level economic activity (Prakash, Shukla, Bhowmick, and Beyer 2019), to assess regional convergence in India (Chanda and Kabiraj 2020), and to analyse urban growth (Gibson, Datt, Murgai, Ravallion 2017, Galdo et al. 2020). Both electricity consumption and night-time light track overall economic activity, including activity in the informal sector.

Figure B.16: GDP, electricity consumption, and night-time light intensity

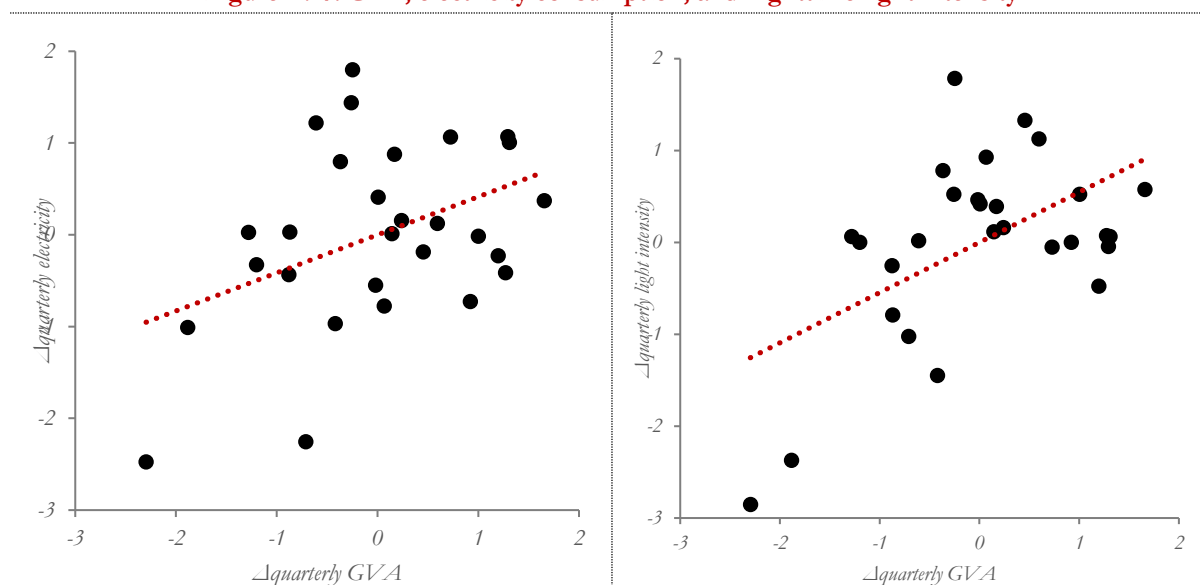


Note: The night-time light data is cleaned according to Beyer, Franco-Bedoya, and Galdo (2020).

Source: National Statistical Office, POSOCO, and Earth Observation Group (Colorado School of Mines), and World Bank staff calculations.

Gross value added (GVA), the national account estimate of economic activity, electricity consumption, and light intensity all increased over the last few years (Figure B.17). On average, GVA increased 6.4 percent a year, electricity consumption 3.2 percent, and light intensity 5.6 percent. There is vast literature on the long-run relationship of these variables and the causal relationship between them across the world (Ferguson, Wilkinson, and Hill 2000). Chen, Kuo, and Chen (2007) find a bi-directional long-run causality between the two variables in 10 Asian countries and a short-run causality from GDP growth to electricity consumption. Note that the different series exhibit different seasonal patterns. Electricity consumption tends to be lower in winter than in summer and for night-time light intensity, it is the opposite, with winters being brighter than summers. In order to analyse the short-run relationship of these variables, they are detrended to abstract from the different seasonal patterns.

Figure B.17: GDP, electricity consumption, and nighttime light intensity



Note: The dots show qoq growth rates from Q2 2013 to Q1 2020 after detrending and seasonally adjusting the data. The night-time light data is cleaned according to Beyer, Franco-Bedoya, and Galdo (2020).

Sources: National Statistical Office, POSOCO, and Earth Observation Group (Colorado School of Mines), and World Bank staff calculations.

Both proxies are positively related to economic activity also in the short run. Figure B.17 plots the relationship of the detrended and seasonally adjusted variables. As can be clearly seen in the left panel, electricity consumption and economic activity are closely related. The right panel shows that the same is true for night-time light intensity and economic activity. These relationships are statistically significant at the 1 percent level and hold for different subsamples as well. The elasticity between GVA and night-time light intensity has been very stable during the first and second half of the sample.¹⁰⁵ The elasticity of electricity consumption has weakened somewhat but was statistically significant at the 10-percent level in both periods.

Table B.4: Monthly co-movement of electricity and night-time lights with other indicators

	Electricity consumption										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Trade		Generation/production					Traffic			Tourism
	Exports	Imports	IP	Auto	Steel	Electricity	Textile	Freight	Cargo	Passenger	Foreign Tourist Arrivals
Coefficient	0.182***	0.227***	0.432***	0.241***	0.313***	0.928***	0.216*	0.705***	1.165***	0.0413***	0.188***
Standard error	(0.0383)	(0.0326)	(0.0397)	(0.0333)	(0.0335)	(0.0344)	(0.115)	(0.0746)	(0.134)	(0.00544)	(0.0274)
N	85	85	85	84	85	85	66	85	85	85	84
R2	0.854	0.885	0.928	0.932	0.913	0.983	0.962	0.915	0.907	0.893	0.929
	Nighttime light intensity										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Exports	Imports	IP	Auto	Steel	Electricity	Textile	Freight	Cargo	Passenger	Foreign Tourist Arrivals
Coefficient	0.0428	0.0220	0.143	0.223**	0.134	0.690***	0.666**	0.394*	-0.120	0.0154	0.140*
Standard error	(0.0809)	(0.0746)	(0.118)	(0.0979)	(0.0912)	(0.185)	(0.310)	(0.198)	(0.338)	(0.0134)	(0.0814)
N	97	97	97	96	97	97	78	97	97	97	96
R2	0.830	0.829	0.832	0.841	0.833	0.854	0.858	0.837	0.829	0.832	0.837

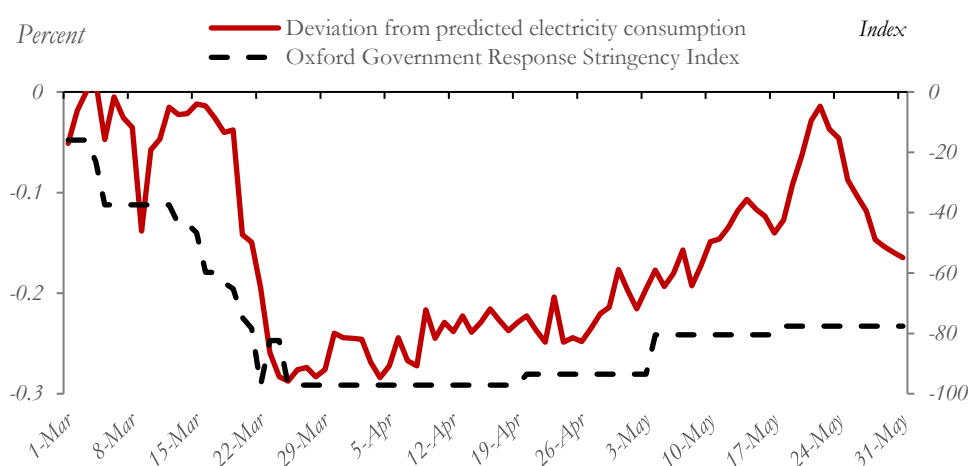
Notes: All regressions are in logs and include a time trend and month fixed effects. * $p < .1$, ** $p < .05$ and *** $p < .01$

Sources: CEIC, POSOCO, Earth Observation Group (Colorado School of Mines), and World Bank staff calculations.

¹⁰⁵ The first half goes from Q2 2013 to Q3 2016 and the second half, from Q4 2016 to Q1 2020.

Both are also related to other monthly high-frequency indicators. To confirm this, we aggregate the daily electricity data to monthly frequency. Table B.2 shows the monthly relationships of our two proxies with other high-frequency indicators after detrending and seasonally adjusting them. Electricity consumption is strongly related to trade, both to exports and imports (first two columns). It is also strongly related to industrial production and similar activities (next six columns). The near one-to-one relationship with electricity generation, which comes from an entirely different source than our daily measure, validates our data. Electricity consumption is also related to traffic, whether that is from freight, cargo, or passengers. Last but not least, it even comoves with tourist arrivals. The monthly fluctuations in night-time light intensity are not as strongly related to the other high-frequency indicators, but the relationship is still statistically significant at least at the ten percent level for half of the indicators. Both variables are noisy measures of economic activity. This is both because of measurement errors in electricity consumption and especially in night-time light intensity, and because both are only proxies of economic activity. Electricity consumption data has some advantages over night-time light intensity. In our analysis of monthly indicators, electricity consumption has a stronger relationship with other high-frequency indicators. When both are available, electricity consumption is the better proxy for GVA and night-time lights do not add much information (Beyer, Franco-Bedoya, and Galdo 2020). And at the state level, electricity consumption relates much stronger to GVA than does night-time light intensity, for which the relationship is weak (Prakash et al. 2019). In addition, electricity consumption is available at higher frequency. Night-time lights, on the other hand, are available at much higher spatial granularity. The two proxies are hence complementary.

Figure B.18: Deviation of electricity consumption from normal levels



Note: The prediction model of electricity consumption is presented in Beyer, Franco-Bedoya, and Galdo (2020) and accounts for seasonal patterns, varying consumption over the course of the week, holidays, and temperature. It explains over 90 percent of the variation in India's electricity consumption. The plotted deviations are the coefficients of daily fixed effects that are included in the estimation.

Sources: Update based on Beyer, Franco-Bedoya, and Galdo (2020).

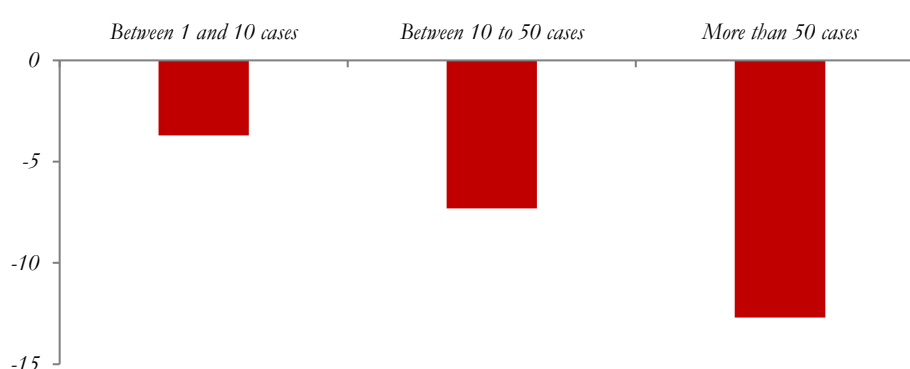
Electricity consumption may vary for other reasons than seasonal patterns and changes in economic activity. For example, it tends to be lower at holidays and higher if temperatures are very high. A recent World Bank Policy Research Paper estimates an electricity consumption model that takes these factors into account and can explain 90 percent of the daily variation in electricity consumption in India (Beyer, Franco-Bedoya, and Galdo 2020). One can then compare the actual electricity consumption to that predicted by the model.¹⁰⁶ The first meaningful deviation from normal levels was on March 22, when India

¹⁰⁶ This can be either done by including daily fixed effects in the estimation of the model or by doing an out-of-sample prediction. In both cases, the deviations from normal are the same.

observed a 14-hour long curfew that the Government of India implemented in all major cities and 75 districts with COVID-19 cases. Electricity consumption dropped further the next days and especially after the national lockdown was implemented on March 25 (Figure B.18). It was nearly 30 percent below normal levels at the end of March and remained a quarter below normal levels in April. When some restrictions were eased in May, electricity consumption recovered, but it remained below normal levels. On average, it was 14 percent below normal levels in May, and in June it was still 8 percent below normal.¹⁰⁷ Despite the lockdown being uniform across the country, there has been considerable heterogeneity across states, with electricity declining below half the normal levels in some and electricity not declining at all in others (Beyer, Franco-Bedoya, Galdo 2020).

Figure B.19: Effect of COVID-19 infections on districts' night-time light intensity

Additional decline in night light intensity with local COVID-19 infections
Percentage points



Source: Beyer, Franco-Bedoya, and Galdo (2020).

Note: The additional effect is based on a regression of the change in nighttime light intensity in April 2020 compared to a year ago for 624 districts. The estimation controls for the manufacturing and service employment share, as well as for past in and outmigration. The three bars report the coefficient of a respective dummy and all are statistically significant at the 1 percent level.

Nighttime light intensity data can be used to examine the effects of the COVID-19 pandemic below the state level, which is not possible with electricity data. In April, night-time light intensity declined in more than two thirds of the districts and the average decline was 12 percent (Beyer, Franco-Bedoya, Galdo 2020). Over the past few years, night-time light intensity has been increasing in many districts. But in eight out of ten districts the growth was below the growth last year, confirming the economic impact of the lockdown in April.¹⁰⁸ As for states, there was some heterogeneity between districts. One important driver of night-time light intensity was the local infection rate. Compared to districts with no known COVID-19 cases, districts with cases experience a larger decline in night-time light intensity (Figure B.19). The decline was 3.7 percentage points larger in districts with 1 to 10 cases (per million), 7.3 percentage points larger for districts with 11 to 50 cases, and 12.6 percentage points larger for districts with more than 50 cases. This suggests that individuals respond to local infection risks and, if risks increase, either follow restrictions more closely or undertake additional voluntary measures to reduce mobility. This has important implications for the economic impact of easing restrictions. If the risks of an infection are not declining, people may not be willing to change their behaviour again (Maloney and Taskin 2020).

In the current context, daily electricity data and information on night-time light intensity are helpful to monitor the economic situation. But they may also be able to complement national account

¹⁰⁷ The temperature for India that enters the model is a population weighted average of the temperatures in Delhi, Kolkata, Chennai, and Mumbai. The data is currently only updated until May 13, 2020. The rise in electricity consumption at the end of May is likely related to a heat wave. In the next version of this analysis, the temperature data will be updated as well.

¹⁰⁸ On average, their growth was 18 percentage points lower in 2020 compared to 2019.

estimates more generally. National account measures face specific challenges related to the COVID-19 pandemic, which makes data collection through surveys even more difficult. In line, the National Statistical Office mentioned data collection challenges related to the lockdown and warned of the revisions to its growth estimate for the fourth quarter of 2019/20. In future work, it will be interesting to analyse how this data can be employed to amend traditional measures of economic activity and how helpful this information is to improve nowcasts of economic activity.

ANNEX

Import and Export Measures Adopted by India January-April 2020

Import Measures	Export Measures
Temporary elimination of import tariffs on: (i) artificial respiration or other therapeutic respiration apparatus (ventilators) (HS 9018; 9019); (ii) face masks and surgical masks (HS Chapter 63); (iii) personal protection equipment (HS Chapter 62); (iv) COVID-19 testing kits (HS Chapters 30 and 38); and (v) inputs for manufacture of items (i to iv) subject to the condition that the importer follows the procedure set out in the Customs (Import of Goods at Concessional Rate of Duty) Rules, 2012, due to the COVID-19 pandemic. Imports also exempted from the Health Cess	Further amendments introduced to the export policy of Active Pharmaceutical Ingredients (APIs) and formulations made from these APIs (HS 2933.29.10; 2933.29.20; 2933.59.90; 2936.22.10; 2936.25.00; 2936.26.10; 2937.23.00; 2941.40.00; 2941.50.00; 2941.90.90; 2942.00.90; 3004.20.50; 3004.20.61; 3004.20.95; 3004.39.19; 3004.50.32; 3004.50.34; 3004.50.39; 3004.90.15; 3004.90.21; 3004.90.22; 3004.90.23; 3004.90.99), changing from restricted to free, due to the COVID-19 pandemic
Imports of certain medical and surgical instruments and apparatus (HS 9018; 9019; 9020; 9021; 9022) exempted from the "health cess"	Certain products (e.g. surgical masks/disposable mask (2/3 ply); all gloves except NBR gloves; all ophthalmic instruments and appliances under ITCHS 9018.50 except medical goggles; surgical blades; non-woven shoes (disposable); breathing appliances used by airmen, divers, mountaineers and firemen; gas masks with chemical absorbent for filtration against poisonous vapour, smoke, gases; HPDE tarpaulin/plastic tarpaulin; PVD conveyor belts; and biopsy punch) exempted from the export ban implemented due to the COVID-19 pandemic
Decrease of import tariffs (from 10% to 5%) on medical or surgical instruments and apparatus (HS 9018; 9019; 9020; 9021; 9022)	Amendments introduced to the export policy of ventilators, including any artificial respiratory apparatus or oxygen therapy or any other breathing appliances/devices and sanitizers (HS 3004.90.87; 3401; 3402; 3808.94; 9018; 9019; 9020), resulting in an export restriction due to the COVID-19 pandemic
Amendments introduced to the import policy of iron and steel and incorporation of policy condition in HS Chapters 72; 73; 86, Schedule-I (import policy), resulting in an extension of validity to 135 days to automatic registration number generated under the Steel Import Monitoring System "SIMS" until 31 March 2020, due to the COVID-19 pandemic	Amendments introduced to the export policy of Personal Protective Equipment/Masks-reg (HS 3926.90; 6217.90; 6307.90; 9018.50; 9018.90; 9020), resulting in an export restriction due to the COVID-19 pandemic
	Amendments introduced to the export policy of masks, ventilators, and textile raw materials for masks and coveralls (HS 3926.90; 6217.90; 6307.90; 9018; 9020; 5603.11; 5603.12; 5603.13; 5603.14; 5603.91; 5603.92; 5603.93; 5603.94), resulting in an export restriction due to the COVID-19 pandemic
	Amendments introduced to the export policy of hydroxychloroquine (HS 3004.90.87; 3401; 3402; 3808.94; 9018; 9019; 9020), resulting in an export restriction (subject to some exceptions), due to the COVID-19 pandemic. On 4 April 2020, exceptions eliminated resulting in an export prohibition of hydroxychloroquine
	Amendments introduced to the export policy of diagnostic kits (diagnostic or laboratory reagents on a backing, preparation diagnostic or laboratory reagents whether or not on a backing, other than those of heading HS 3006 or 3008; certified reference materials) (HS 3822), resulting in an export restriction due to the COVID-19 pandemic
	Amendments introduced to the export policy of Active Pharmaceutical Ingredients (APIs) and formulations made from these APIs (HS 2922.29.33; 2933.29.10; 2933.29.20; 2933.59.90; 2936.22.10; 2936.25.00; 2936.26.10; 2937.23.00; 2941.40.00; 2941.50.00; 2941.90.50; 2941.90.90; 2942.00.90; 3004.20.50; 3004.20.61; 3004.20.95; 3004.39.19; 3004.50.32; 3004.50.34; 3004.50.39; 3004.90.15; 3004.90.21; 3004.90.22; 3004.90.23; 3004.90.99), resulting in an export restriction due to the COVID-19 pandemic
	Further amendments introduced to the export policy of formulation made from paracetamol (including FDCs) (HS 3004.90.99), changing from restricted to free, due to the COVID-19 pandemic. Paracetamol APIs will remain restricted for export
	Amendments introduced in the Export Policy of Sanitizers. Only "alcohol based hand sanitizers" are prohibited for export (HS 3004; 3401; 3402; 3808.94), due to the COVID-19 pandemic. All other items falling under the HS Codes mentioned are freely exportable
	Amendments introduced in the Export Policy of Masks, allowing the export of non-medical/non-surgical masks of all types (cotton, silk, wool, knitted) (HS 3926.90; 6217.90; 6307.90; 9018.90; 9020.9). All other types of masks falling under any HS Codes continued to remain prohibited for exports

Source: WTO, https://www.wto.org/english/tratop_e/covid19_e/trade_related_goods_measure_e.htm, latest data May 20, 2020.

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